Drug & Cosmetic INDUSTRY

FEBRUARY, 1949

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THOMAS R. FARRELL, Editor
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HARRY G. KELBLY, Raw Material Editor
JUSTUS W. MATTHAEI, News Editor
HILDA C. McCOLLOM, Art Director

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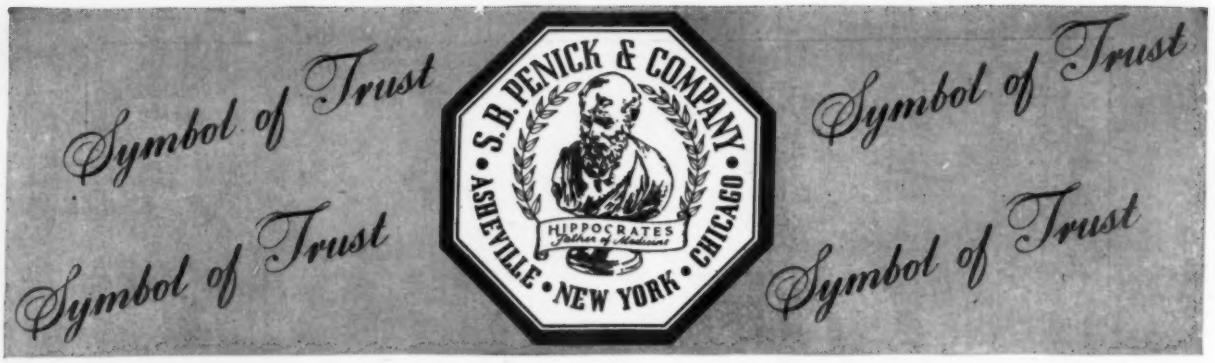

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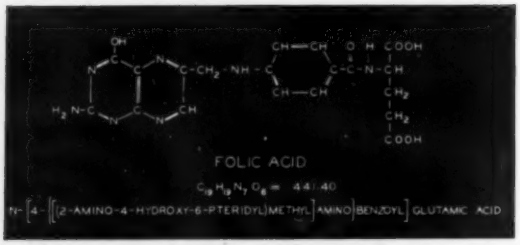

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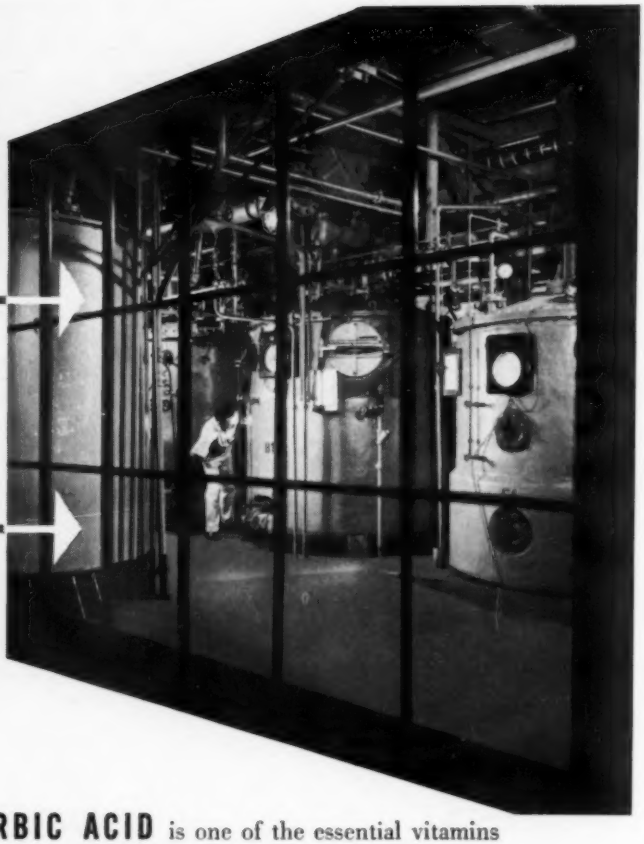

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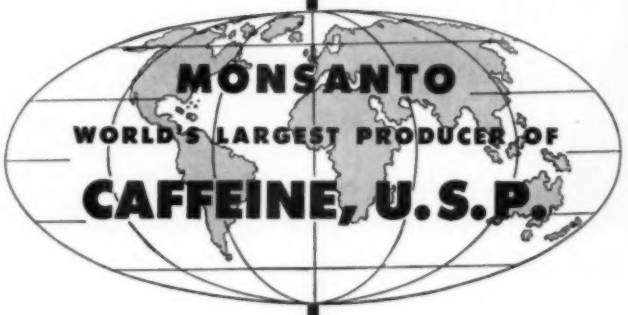

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KEEPING POSTED

To Draft Antibiotic Amendment

LEGISLATION to grant to the Food and Drug Administration general authority to certify the potency and purity of antibiotics is to be drawn up in a series of conferences starting this month between representatives of the FDA and the pharmaceutical manufacturing industry. The agreement to work out a general amendment was reached last month at a meeting called by the FDA to sound out industry sentiment on the question of amending the penicillin certification law to cover the three latest antibiotics to be released, namely aureomycin, chloromycetin, and bacitracin. Representatives of the American Drug Manufacturers Association, the American Pharmaceutical Manufacturers Association, and the Proprietary Association of America said they would accept an invitation from the FDA to appoint committees to work with the FDA on drafting of a general amendment. A representative group from those manufacturers who are not members of any of the three associations, and who are not manufacturers of antibiotics, but who nevertheless might be affected by such an amendment, will also be invited to participate.

Because the drafting of a general amendment will take so much time that it is unlikely that the work can be completed during the present session of Congress, it was decided that FDA should go ahead with its original plan to have the three new antibiotics specifically named in the law this year while work on the drafting of the general amendment goes forward.

Because the industry is not too familiar with this class of products, there being considerable uncertainty as to what antibiotics should require certification and which should not require certification, considerable difficulty is forecast in the drafting of a general amendment. It is generally recognized that medical research has only begun to scratch the surface in finding new useful drugs through fermentation. The drafting of a suitable definition for the term antibiotic which will be broad enough to include all products of therapeutical value which the results of fermentation, but which will not grant such wide powers as to permit abuse of the certification powers, is a real problem. Under most definitions, alcohol could be classed as an antibiotic.

Congress and F.T.C. Confusion

REGARDING the necessity for Congressional action to clarify the confusion resulting from Federal Trade Commission statements and actions, Senator Johnson of Colorado recently said:

"Industry and the Congress do not know who to believe, since all the people at the Federal Trade Commission were supposed to be experts. In the present confused status businessmen must learn the hard way and the expensive way who is correct. Candidly, the American people are entitled to know what pricing systems are legal, and apparently the only place where a clarification of this important economic problem can be obtained is in the Congress. It dare not permit any Commission to continue to be all things to all people. We cannot permit some officials of the Commission to publicly state one view to be the policy of the Commission while other officials give a diametrically opposed view of the same Commission's position. Congress must clear this thing up once and for all."

Conference or Caucus?

A COMMITTEE set up a year ago by the National Drug Trade Conference to study the rules and activities of the Conference, especially with respect to the requirement of a unanimous vote on any action, reported at the meeting last month that it had not accomplished. However, the committee was continued to report back at the meeting next December. Conference President Carson P. Frailey stated his feeling, as expressed by an early predecessor, Dr. J. H. Beal, that the Conference is a conference and not a caucus. He said that if the rules of the Conference were changed to make it a caucus instead of a Conference, he would recommend to the executive committee of the American Drug Manufacturers' Association that the ADMA withdraw from the Conference.

The Government Health Program

THE bills introduced in Congress for enactment of compulsory sickness insurance are S. 5, and its companion bill H. R. 783. These are the same bills as introduced in the last Congress upon which hearings were held. More sponsors have jumped aboard the bill this time, the Senate bill being sponsored by Senators Wagner, Murray, Chavez, Pepper, and Taylor. However, for the House bill we still have only Representative Dingell. So the bill can now be called the Murray-Wagner-Chavez-Pepper-Taylor-Dingell Bill. Apparently, as Jimmie Durante says, "Everybody wants to get into the act."

The bill provides for public health benefits, including medical services—including a general practitioner and a specialist when requested by the general practitioner, —dental service, home nursing service, hospital and auxiliary services. The auxiliary services include such things as X-ray, bacteriological, pathological, and other types of laboratory diagnosis, physiotherapy, services of an optometrist, chiropodists. Chiropractors and osteopaths are not mentioned, but Federal Security Administrator Oscar Ewing says that persons would be eligible to receive the care of any licensed practitioner in a particular State.

The bill provides that the Government will pay for prescriptions, eyeglasses, and special appliances. Some maintain that toupees are included under this provision. The hospital services provide a maximum of sixty days in any one year but do not include hospitalization for mental or nervous diseases or tuberculosis. Operation of the plan would be under local committees in the several States under direction from the Washington headquarters.

The bill also provides for a National Health Insurance Board which will be under the supervision of the Surgeon General of the Public Health Service and the Commissioner of Social Security. This board will have an advisory committee of sixteen members appointed by the Federal Security Administrator. Provisions are included for setting up funds for increasing the number of physicians, and also allocation for building hospitals.

The program is to be paid for by a three to four per cent payroll deduction on the first $3,000 or portion thereof from the employee and a like amount to be paid by the employer.

Under this proposed plan and the proposed plan to change the amount of social security payments, the amount paid by an individual would multiply five times or more from what they have been. The same would be true for the amount that the employer must pay to match the payments made by the employee. Under the present system the Social Security tax is one per cent of the first $3,000 of salary, amounting to $30 per year. The new social security program offered for enactment increases the contribution by both employee and employer from one per cent to one and one-half per cent, and it increases the amount of salary on which this is paid from $3,000 to $4,800 dollars (due to inflation). This means that a person earning $4,800 or more will pay for social security $72, instead of $30. In addition, under the proposed program, in the beginning one-quarter of one per cent up to $4,800 will be collected for the health program. Those favoring the bill estimate that this will go to two per cent, while others who are familiar with such subjects believe that it go to four per cent. The Murray-Wagner-Chavez-Pepper-Taylor-Dingell Bill, merely for the compulsory sickness insurance, provides for payments of from three to four per cent of income up to $3,000. In addition, the proposed program provides that there will be one-half of one per cent for disability insurance, and one per cent for a permanent disability insurance.

What the total will be for any individual can easily be figured out, but it is certain that it will be many times the $30 now paid and it will be quite a sizable sum that is going to make those from whom it is taken holler loud when they find it out. Not very many people are going to get something for nothing, and as far as the sickness insurance is concerned, a great many people are going to pay for their medical care two ways—once to the Government, and a second time to their own doctors. The whole scheme appears to be nothing but another method of taxing the people to get more money to run the Government and to kill any further inflation. Certainly people should realize that they are paying enough taxes now and that inflation is about to kill itself through lack of ability at the high prices prevailing. There are depression conditions existing in many industries. Certainly these high deductions from employers are going to raise prices again, and these high deductions from employees are going to make it impossible to buy as much as they are buying at the present time. Add these two things up and they spell a real break in our economy.

German Patents Available

IT APPEARS to be the policy of the Government to release all seized German and other patents of enemy aliens to citizens or corporations of this country for licensing at nominal fees. Recently the announcement was made that the extremely large number of patents held the General Aniline & Film Corporation—which company was seized by the Alien Property Custodian to the extent of 97 per cent of the stock held in Germany—were available for licensing. Now the Government announces that 800 patents in the petroleum and chemical fields, formerly held by German interests, are available for regular licensing. These patents were the property of the I. G. Some have been licensed to American business under certain restrictions pending settlement of litigation between the Government and Standard Oil Co. of New Jersey.

Liquid Vitamin Deterioration

THE Food and Drug Administration is considering new regulations to prevent liquid vitamin preparations from reaching consumers when their potency has fallen below that stated on the labels. Products of about twenty manufacturers, including leading ones, were included in a preliminary survey made mostly at retail level. It was found that a considerable portion of multi-vitamin preparations remain in trade channels for six months to two years, and the potencies of a good proportion of the products were below those stated on the labels. Preparations surveyed included those generally recommended by pediatricians, and sold over-the-counter. FDA officials believe that deterioration occurred because the products were held too long in trade channels. In some products there was no potency deficiency even after two years, while in others the deficiencies ranged up to 85 per cent. Officials explained that it may be necessary to set up regulations requiring manufacturers to carry expiration dates on their labels. Perhaps label warnings to consumers against possible loss of potency will be ordered, or cautions as to storage methods might be ordered placed in the labeling.

Congressional Bills

BILLS placed in the Congressional hopper are many. Those affecting this industry are: H. R., 922, introduced by Mrs. Rogers provides for the coverage of barbiturates under the Federal narcotic laws and placing them in the same category as morphine, opium, and cocaine. This is the same bill introduced in previous sessions of Congress. Referred to the Committee on Ways and Means.

H. R. 184, introduced by Mr. Harris, referred to Committee on Expenditures in the Executive Department, creates a new executive department of the Government to be known as the Department of Health, Education and Security. It provides for a Secretary in the Cabinet, salary $15,000 per year, with three under-Secretaries, one each for Health, Education, and Security, with salaries of $12,000 each per annum. It does not require the under-Secretary in charge of the Health Division to be a physician. It does provide for setting up an Advisory Committee to the various departments, and the Advisory Committee for these departments will be experts in their particular fields. It also provides for the transfer of various Government units to this agency and to particular departments of this agency. For example, it transfers to the Department of Health the U. S. Public Health Service, the Food and Drug Administration, Freedman's Hospital, and St. Elizabeth's Hospital.

H. R. 1402, introduced by Mr. Miller, establishes a Department of National Health and Welfare, as an executive department.

H. R. 160, introduced by Mr. Crosser, referred to the Committee on Interstate and Foreign Commerce, amends Section 801 of the Food, Drug, and Cosmetic Act, providing in substance that the Secretary of the Treasury shall cause the destruction of articles imported unless such article is to be exported under certain regulations that may be prescribed within 90 days. It further provides that articles to be imported or offered for import may be released under a sufficient bond when such articles are relabeled, or through other types of action may be brought into compliance with the requirements of the Federal Food, Drug, and Cosmetic Act, so that when they are finally distributed they will be satisfactory. All expenses incurred by the Government are to be paid by the importer.

Publicity for Sickness Insurance

IF COMPULSORY sickness insurance is not enacted in this country soon it will not be for lack of publicity. Radio and television are really going to town on this one in their various forums. At least once or twice a week a program having to do with the subject comes over the air waves.

Two state legislatures have bills before them calling for systems of prepaid medical care. In California, Governor Warren has, for the third time, asked for enactment of such a plan. In 1945 and 1947, proposals of this sort were defeated through the efforts of organized medicine. A bill calling for a two per cent payroll tax, shared equally by employer and employee has been introduced in the New York State legislature to provide for payment of medical, hospital, and laboratory services.

One of the strongest arguments of those favoring enactment of compulsory insurance is that at least one-third of the people of the country earn $3,000 or less, these people cannot afford to pay for adequate medical care. Also the proponents of the measure state that as regards voluntary insurance, there is no system available which gives complete coverage for the payment of everything. Also they point out that the class of people earning $3,000 or under cannot afford to pay for insurance as it is now offered, and they certainly would not be able to pay for a complete coverage plan if it were offered on a voluntary basis and by some private group. In other words, these people claim that those earning $3,000 or less must get all or most of their medical care free—or at least paid by people who earn more than they do.

Smith, Kline & French Grants

GRANTS in support of medical research totaling $314,761 have been awarded by Smith, Kline & French. Twenty-seven of seventy-three grants were made to twenty medical schools, and the balance to institutes, clinics and individual investigators. Funds were provided under three main categories: scholarships and fellowships; aids to pre-clinical research in such fields as pharmacology, bacteriology, biochemistry, histology, microanalysis, mycology, organic chemistry, pharmaceutical chemistry and physical chemistry; and investigations in various fields of clinical medicine as hypertension, pain, cardovascular conditions, epilepsy, anemia, dermatology, obesity.

Seeks More Antibiotics in Soil

THE search for new antibiotics continues in the soil. Since the first antibiotics, gramacidin and tyrothrycin were deliberately sought in the soil, one of the latest antibiotics of great merit—chloromycetin—was recovered from a handful of Venezuelan soil by Professor Paul R. Burkholder of Yale. Now Professor Burkholder has started a new project under which he will analyze more than 5,000 soil samples from all parts of South and Central America. Last month he dispatched an assistant, Richard A. Benedict to Latin America for a 15,000 soil-collection trip.

Fair Trade and Delivered Prices

A STRONG offense has always been recognized as the best defense, and it appears that these tactics are being used in the matter of national operation under the State Fair Trade Acts. Because of the general confusion existing concerning the subject of basing points, freight equalization, and delivered prices, bills have been introduced in Congress reaffirming the principle of uniform delivered prices. The bills introduced are S. 236, introduced by Senator Edwin C. Johnson (D., Colo.), and HR 1001, introduced by Representative Philip J. Philbin (D., Mass.). The bills make it plain that a manufacturer may legally sell his products at uniform delivered prices throughout the country. They also permit manufacturers or distributors to absorb freight to meet competition in distant markets. The seriousness of the situation was called to the attention of the industry last Fall when Senator Capehart addressed the National Association of Retail Druggists. At that time Senator Capehart said that drug manufacturers might be forced to adopt f. o. b. factory pricing, and this would be a serious blow to fair trade agreements. In an official policy statement of four of the five F. T. C. commissioners (Commissioner Lowell excepted), the Commission denied that its policies or the court decisions would interfere with uniform delivered price systems of individual sellers. However, the members of the industry do not trust these statements and would much prefer to have the policy fixed by law.

Price Increases and Retail Prices

JOHN Dargavel, of the N. A. R. D., tells that some manufacturers have raised prices to retailers without raising the list prices to the consumers. He says:

"For a long time $2, $4, and $8 a dozen have been the standard prices in the drug industry. They are list prices, $2 items selling for 25 cents; $4 items for 50 cents; and $8 items for $1. Now what do we find that some of the manufacturers have done? They have raised their prices from $2 a dozen for 25 cent items to $2.16, $2.20, or $2.25, and from $4 a dozen for 50 cent items to $4.25, $4.35, or $4.40, etc., and they continue to maintain the items as 25 cent, 50 cent, and $1 sellers. Certain of the mnaufacturers have even set the minimums at less than 25 cents, 50 cents, and $1.

"The minimum resale prices on many items have been or are too low, in that they allow a margin of only 16 2/3 per cent on 25 cent items selling for 19 cents. This minimum is used simply to stop predatory price-cutting. It never was intended that the minimum price should ever be more than a minimum price. Yet these manufacturers are attempting to set their price list on their minimum Fair Trade price. Such a policy is absurd, and any manufacturer who puts prices of that kind into effect has no consideration whatsoever for the retailer.

"The cited cases demonstrate just another trick some manufacturers are using to squeese the druggist, increasing their own profits and reducing the retailer's. They know the cost of business has gone up, and they must have more money for their products—yet they take it out of the poor retailer."

Mr. Dargavel brings up a subject that must be squarely faced by manufacturers. Certainly if the manufacturer's cost have gone up, so have the retailer's. And the retailer cannot load these additional costs on other departments—such as prescriptions—indefinitely. Consumers are constantly yelling loud and long about the high cost of prescriptions and ethical drug products. Manufacturers of advertised products cannot raise their prices to wholesalers and retailers and not raise their prices to the consumers. Adequate profits for distributors all along the line must be part of any sound pricing policy if a manufacturer wants to stay in business.

Limit Quantities for Discounts

THE Federal Trade Commission has adopted procedures for the limitation of quantity discounts which it deems to be "unjustly discriminatory or promotive of monopoly." The Robinson-Patman Act provides that the Commission, after investigation and hearings, may establish quantity limits when it finds that available purchasers in greater quantity "are so few as to render differentials on account thereof unjustly discriminatory or promotive of monopoly in any line of commerce." The act provides that, once these limits are established, section 2 of the act shall not be construed to permit discounts based on quantities greater than those fixed by the Commission.

The Commission plans a full investigation into any commodity, or type of commodity to obtain information such as: quantity differentials granted buyers; number of available purchasers of given quantities; facts bearing upon competitive conditions existing in the distribution of the commodity. Following this, a proposed discount rule may be formulated and published. If a rule is proposed, interested persons will be given an opportunity to submit any data, views, or arguments concerning it, including alternate or substitute proposals. After consideration of all information, the Commission will, if it feels action warranted, promulgate a quantity discount limit rule.

Tax on Atomizer Combinations

COMBINATION packages containing perfume or cologne and an atomizer to fit the perfume or cologne bottle are taxable at retail only to the value of the perfume or cologne. In other words, the tax is applied "only to that portion of the retail selling price of the combination package which is allocable to the perfume or cologne." This is a change of attitude on the part of the Treasury Department, as previously the entire article was considered taxable.

Delgado Reports on Philippines

FRANK A. Delgado, for many years associated with the U. S. Department of Commerce, and other Government agencies, is now manager of the Sales and Wholesale Department, Philippine American Drug Company, Botica Boie. In a recent issue of the American Chamber of Commerce Journal, published in Manila, Mr. Delgado wrote on the pharmaceutical situation in the Philippines. Excerpts:

There has been a general falling off in the pharmaceutical business which will continue into 1949. One authority predicts drop of 40 per cent on the average varying with different lines depending on quantity and quality of promotion, aggressiveness of distributor, and support received from manufacturers. During 1948, not less than 4 or 5 additional ethical American manufacturers entered the market, employing sales staffs, and engaging in the usual promotion activities. Most every week brings one or more price increases from American manufacturers—frequently as high as high as 30 per cent—explained as due to steady increase in cost of materials. However, local wholesalers and importers continue to quote the old prices due to oversupply. Price-cutting became so serious that an American manufacturer's branch threatened to stop selling distributors who cut prices or gave discounts except to a list of selected wholesalers. Wholesalers are in far greater number than prewar, and newcomers are apt to give away most of their mark-ups in an attempt to stay in business on a 5 to 10 per cent gross margin.

The outstanding mistake which most American export managers insist on making is to try to force the use of Latin-American copy. It is difficult to make them understand that any good American copy that is successful in the United States, will, generally be well received. A big mistake is to send 3,000 to 4,000 mailings of expensive literature without first having ascertained whether there is any stock or sufficient stock of the product on the pharmacists' shelves.

Manufacturers must not assume that because a product is a large seller in the United States, that it will have a favorable reception in the Philippines. Many best-sellers are only "shelf-warmers" there.

Domestic production of medicinals, particularly of the popular type, is greater than frequently believed, and the domestic manufacturer is usually much more encouraged than his American competitiors when it comes to advertising. They use not only most of the media available, but their advertisements are generous in size and the copy compares favorably with that for imported articles.

Tilden Celebrates 125 Years

THE Tilden Company, which claims the title of "the oldest manufacturing pharmaceutical house in America," is celebrating its 125th anniversary this year. The company was founded in 1824 by Elam Tilden for the production of "Tilden's Patent Chlorine Cosmetics and Pills. In its early years the Company sold over 160 crude drugs, various extracts, inspissated juices, ointments, pills, and syrups. Today, the Tilden catalog lists over 300 modern pharmaceuticals.

The founder of the company was an industrious, intelligent Connecticut-born American. One of his sons, Samuel J. Tilden, became Governor of New York, ran for President of the United States, and was cheated out of this high office through connivance on the part of the electoral college. Another son, Henry A. Tilden, chemically and pharmaceutically minded, joined his father in the company and did much to keep the business thriving. In 1848, Henry originated and produced the first alcoholic Fluid Extract ever produced. For a long time, Tilden supplied practically all the fluid extracts used in this country. The prestige of the company, and powerful impetus to its sales resulted from this step in the creation of more uniform and more palatable liquid medications.

About this time the Tilden Company acquired and operated, until about 1890, a four-pot glass bottle factory about one-eighth mile from the present New Lebanon, N. Y. site. It is claimed that the first blue bottles in America were blown there.

J. Harry Cox, for many years the guiding spirit of the Tilden Company until his death in 1942, joined the company in 1880 after leaving the employ of Hull, drug brokers in New York. Mr. Cox was graduated from City College of New York with an A. B. degree. His efficiency was such that it was not long after his arrival that he was placed in charge of the company's offices. Changing to better methods of business, Mr. Cox gave the company great impetus.

From the beginning the company has always been under the guidance and management of either the Tilden or Cox family. In all its long history there have been only four presidents. Even today a Cox (W. Gordon Cox, son of J. Harry Cox) is president, and a Tilden (Mrs. Agusta Tilden West) a vice-president.

During the early years the company grew some of the roots and herbs needed for their fluid extracts and other medicinals, such as hops, celery seed, wild lettuce, dandelion, burdock, and motherwort. The company's own collectors gathered corn silk, wild cherry, and pine bark.

About 1880, the Tilden Company built its own telephone line from its offices in New Lebanon, N. Y. to Pittsfield, Mass., a distance of twelve miles. This was the only telephone in town until a telephone company started there in 1894. This telephone took over and maintained the Tilden line and provided Tilden with free service to Pittsfield. This arrangement continued until 1920 when the Public Service Commission decreed that Tilden must pay for its Pittsfield calls.

Henry A. Tilden was the first to sugar-coat pills and tablets, an idea he conceived while watching almonds being sugar-coated in a Boston candy factory. He invented various pieces of pharmaceutical apparatus such as stills and tablet machines which he never patented.

Company loyalty is strong at Tilden. A typical example is Mrs. Lois Wallace Rider, wife of the recently deceased secretary of the company, A. Ross Rider. Coming to Tilden in 1903 direct from an Albany business school as a stenographer, she became private secretary to J. Harry Cox. Today, forty-five years later, she is still with Tilden, as private secretary to W. Gordon Cox.

All laboratory and new product procedures are under the able supervision of John O'Neil Closs, Ph.D. Research and investigation are under way to continue to maintain Tilden's position in the pharmaceutical industry.

Goes to the Dogs

ODORIZING an advertisement in the January 19th issue of the Chattanooga New-Free Press caused that particular issue to go to the dogs. It seems that, in keeping with a modern trend in advertising, a bakery placed an advertisement giving the odor of cinnamon flavor. Dogs all over the city pounced on the newspapers when carrier boys tossed them on porches. A wide interest in this one advertisement by the dog population of the city reduced human readership of any of the advertisements carried to a minimum.

Max Factor and Beauty Factors

AS WE recently stated, because of the objections of Max Factor & Co., to the name Beauty Factors, used by the producers of Insta-Curl, the latter company agreed to change its name. However, when the new name turned out to be Beauty Factuers, Max Factor still objected, stating that they considered this new name just as objectionable as the former one. Because Beauty Factors would not agree to a "substantial change of name," Max Factor has brought action against Beauty Facteurs, Inc., to force a further change of name.

Home Permanent Market

WITH the curl capsule bubble burst, predictions of a widely expanding market for the home permanent wave business are being made. Lever Brothers back in the market with the Rayve home permanent, and Henry P. Woulfe, president of Lever's Pepsodent division foresees a level of 44,000,000 units annually, resulting in an annual sales volume of $57,-000,000 at retail. This volume compares favorably with the facial tissue business, according to Mr. Woulfe, it is more than twice the nail polish market, the hand lotion and cream market, or the deodorant market.

While Toni volume is estimated at about $30,000,000 annually, and more than 2,000,000 women a month have a Toni wave, there is believed to be plenty of room for other manufacturers as there exists a large market that has still not been claimed by anyone. In other words, the use of the home permanent by the women of this country still has a long way to go because a very large number of women still have to try their first home permanent.

Hudnut President Charles A. Pennock, who is also president of the Toilet Goods Association, writing in January BEAUTY FASHION, estimated the home permanent market at $50,000,000 at the present time. Hudnut has been, and still is, one of the leading makers of the home permanent, and, in fact, sold the Rayve shampoo and Hedy home permanent to Lever Brothers. This furnished the base upon which Lever produced its present Rayve home permanent. It must be recalled that this business is only between five and six years old.

F.T.C. Cosmetic Rules

By THOMAS R. FARRELL

LAST month the Federal Trade Commission finally issued the "Proposed Trade Practice Rules for the Cosmetic and Toilet Preparations Industry." It will be recalled that the Commission called a conference of industry members in May 1947. The purpose of the conference was to obtain the views of the industry with respect to the practices in the trade so that the Commission would have information upon which to base the drafting of the rules. The first industry treated with under this plan was the household dye industry. In this instance, the first draft of the rules was distributed within ninety days following the conference. However, the cosmetics and toilet preparations industry apparently proved a more difficult nut for the Commission to crack, since the proposed rules were not distributed until a year and eight months after the conference was held.

The rules, as distributed, are tentative, and are the subject of a hearing in Washington, February 10. At this hearing interested parties present their views of the rules, approving or disapproving any parts of them orally or in writing. Following this hearing, the Commission considers the testimony given and then drafts the rules in final form and promulgates them as the Commission's interpretation of the law with regard to the cosmetic and toilet goods industry. How long after the hearing the final rules will be promulgated is anybody's guess, but in the case of the household dye industry, the final rules were issued a little over three months after the hearing.

The proposed rules are sixteen in number. However Rule 1, entitled "Prohibited Discrimination," occupies five of nine pages devoted to the Commission's printed copy of the proposed rules. Rule 1 covers prohibited discriminatory prices, or rebates, refunds, discounts, credits, which effect unlawful price discrimination; prohibited brokerage and commissions; prohibited advertising or promotional allowances; prohibited discriminatory services or facilities; and finally two plans for proportionalizing demonstrators.

Paragraph III of Rule 1, which covers prohibited advertising or promotional allowances; and paragraph IV of Rule 1, which covers prohibited discriminatory services or facilities, both prohibit these benefits to dealers unless they are offered to all purchasers "on proportionately equal terms,"—an expression taken from the Robinson-Patman Bill, which has defied explanation. It is the purpose of these two plans for proportionalizing demonstrators, to overcome this difficulty.

The only difference between the two plans offered in the rules is that in Plan A, a percentage of the value of purchases by dealers is used as a basis for the extent of demonstrator services furnished to these dealers; while in Plan B a percentage of the value of sales by dealers is used as a basis.

Whichever basis a manufacturer or distributor uses, he fixes a percentage of the purchases or sales by the dealer for the period of a year, half-year, or quarter-year immediately preceding the period for which the demonstrators are to be furnished. The period of time selected for computation must be the same in all instances. In the case of a new account, the manufacturer or distributor uses the period in which the account starts, and then makes an adjustment at the end of that period and starts using the period immediately preceding.

Since it is generally recognized that the use of demonstrators is not feasible in all accounts due to the type of store, quantity of sales, and other factors, the rule provides "that in respect of any such dealer or customer who cannot feasibly utilize demonstrators in his store, or does not choose to accept demonstrators, he shall be furnished by the member (manufacturer or distributor) with substitute services

of equivalent value to be chosen by the dealer or customer from among a list of substitute services to be made available by the industry member.

"Such substitute services shall include two or more types of services which upon terms specified therewith can be feasibly and valuably utilized by the dealer or customer, such as advertising allowances, payments for display space, merchandising aids, or similar services, lawfully used.

"The industry member shall publish to all his customers and dealers handling his products a list showing the demonstrator services and substitute services he has made available under this Plan and the respective terms applicable to each such services proportionately applied, including statement of the percentage used and the basis for the computation of the amount of demonstrator and substitute services so offered and made available. Said demonstrator services and substitute services and terms upon which furnished, so published and made available, shall not be so arranged or adjusted as to involve unfair discrimination against any such customers or dealers."

The rule specifically states that no demonstrator services or services of any kind need to be extended to customers whose purchases do not exceed $100. However, no specific period of time is specified during which the purchases should be computed for this exemption from granting of services. It can be assumed that the period of time to be used for this computation must be the same as used in cases where services are granted, but, if this is the case, then this would have a strong influence upon whether the manufacturer or distributor chose the three-month, six-month, year, or any other period of time.

The rule also provides that demonstrators be identified. And, since under a strict percentage rule, the amount paid to a dealer for demonstrators most often will not work out to the amount necessary for the salary of one or more demonstrators, provision is made for identification of demonstrators paid in part by manufacturers. This provision reads as follows:

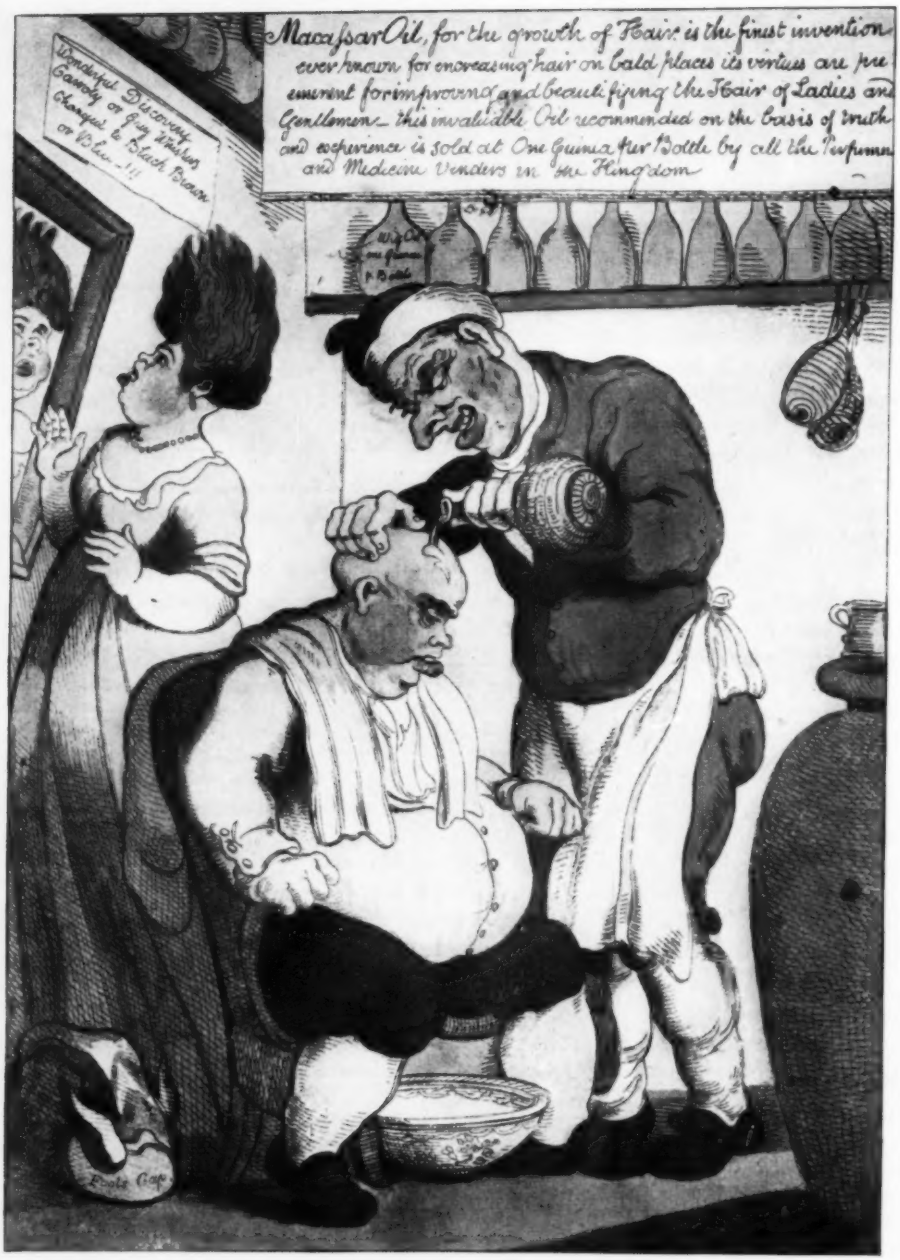
". . . . full and nondeceptive disclosure shall be made to the public by means of a conspicuous sign, badge, or other effective method revealing the fact that the demonstrators or certain salespersons selling cosmetics in the store of the dealer or customer are employed, or are compensated in whole or in part, by the manufacturer or industry member."

Another significant paragraph has to do with giving each manufacturer a fair chance in retail establishments. This reads:

"The practice of furnishing demonstrators or demonstrator services or similar services to dealers or customers shall not be employed in such manner as to shut out competitors by rendering it impossible or impractical to use the store of the dealer or customer as a channel of distribution for competing brands of industry products with the effect of thereby substantially lessening competition or tending to create a monopoly."

While the other rules are important, they generally cover subjects which are clearly understood and regarding which there can be little basic controversy. The subjects covered by these rules are: Rule 2. Misrepresentation in General; Rule 3. Deception as to Origin; Rule 4. Deceptive Imitation of Trade-marks, Trade Names, etc.; Rule 5. Misrepresentation as to Character of Business; Rule 6. Misuse of the Word "Free," etc.; Rule 7. Fictitious Prices; Rule 8. Passing Off an

(*Continued on page 253*)


Macassar Oil, for the growth of Hair is the first invention ever known for encreasing hair on bald places its virtues are pre eminent for improving and beautifying the Hair of Ladies and Gentlemen this invaluable Oil recommended on the basis of truth and experience is sold at One Guinea per Bottle by all the Perfumers and Medicine Venders in the Kingdom

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Skin and Scalp Claims

IN CONSIDERING valid claims to be used in the labeling or advertising of preparations to be used on the skin or the scalp, it must be appreciated that sometimes these preparations come within the definition of "drug" under the Food, Drug, and Cosmetic Act, while very often they classify under the definition of "cosmetic."

There are many titles of preparations for the skin and the scalp which *per se* constitute misbranding in the opinion of the Food and Drug Administration. These are: Contour Cream, Crow's-foot Cream, Deep Pore Cleanser, Eyelash Grower, Eye Wrinkle Cream, Hair Color Restorer, Hair Grower, Hair Restorer, Nail Grower, Non-Allergic preparations, Peroxide

Cream, Rejuvenating Cream, Scalp Food, Circulating Cream, Enlarged Pore Remover, Hair Revitalizer, Muscle Oil, Nourishing Cream, Pore Paste, Skin Conditioner, Skin Firm, Skin Food, Skin Texture Cream or Lotion, Skin Tonic, Stimulating Cream, Tissue Cream, Wrinkle Eradicator, Vitamin Creams or Lotion. Depilatories for permanent removal of the hair, products represented as depilatories which merely bleach the hair, and peroxide creams are also not recognized as valid preparations by the Food and Drug Administration.

Perhaps the greatest difficulty experienced with the labeling of skin and scalp is the determination of whether they are to be classified as drugs, or cosmetics, or both. The definition of a drug product under the Food, Drug, and Cosmetic Act reads:

"An article intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals."

And the definition of cosmetic reads:

"An article intended to be rubbed, poured, sprinkled, or sprayed on, introduced into or otherwise applied to the human body or any part thereof for cleansing, beautifying, producing attractiveness or altering the appearance."

While it is sometimes quite difficult to decide if a drug steps into the drug classification and therefore requires active ingredients to be listed on the label, and perhaps other additional information to be given, the key word in the definition is "disease." According to the dictionary disease is any condition causing discomfort, lack of ease, etc. This means that a sunburn which causes itching, or soreness of any kind is in fact a disease. Therefore, preparations which are recommended for the relief of sunburn, or which are recommended only for the *prevention* of sunburn, are drugs within the meaning of the Food, Drug, and Cosmetic Act.

The Food and Drug Administration had the following to say on this subject:

"In preparations offered for the purpose of acquiring an even tan without burning the skin of which the label claims do not go beyond the provision that the product will aid in acquiring an even tan are cosmetics. The inclusion of claims suggesting that the products are preventatives of or treatments for sunburn may easily throw them into the drug category."

There are words which are used rather loosely, or in a different sense which do not cause preparations to become drugs. Thus if woman receives a beauty "treatment," she certainly does not receive a "treatment" in the same sense of this word when it is coupled with disease, or in the same sense as a treatment is given by a physician or a nurse.

The Food and Drug Administration objects to references to ulcers, or old sores of the skin, contending that these conditions might be the result of a serious systemic condition such as syphilis or tuberculosis. The Administration also objects to references to the value of a preparation in the treatment of a chronic or long-standing condition since it is believed that such conditions should be treated by a physician.

Surprising as it seems to some, eczema may be of internal or external origin. In a Cease and Desist order, the Federal Trade Commission said:

"Eczema is a generic term used by skin specialists to cover all those inflammatory conditions, both acute and chronic, which produce lesions of the skin where it is difficult or impossible to determine the exact nature of the condition. Only a small percentage of cases of eczema are due to fungus infections."

The Food and Drug Administration objects to statements recommending a product as a treatment for eczema, so many products are recommended for relief of itching, burning, and soreness, and for removing the crusts caused by eczema. It is thought that these products are of value in relieving such symptoms regardless of whether the eczema is of external or internal origin, but to be on the safe side, most makers refer to "eczema of external origin." Products offered for relief of itching, and for removal of the fine silvery scales of psoriasis lesions do not constitute a treatment for psoriasis.

With reference to scabies, the Food and Drug Administration stated:

"Recently we have made an intensive study of scabies and have gathered the opinions of the majority of the leading dermatologists of this country. As a result of this survey we have come to the conclusion that scabies is not a disease for which the laity are capable of treating themselves safely. Inasmuch as this point of view represents a change in the Administration's attitude, we have reviewed our files in order to inform individuals with whom in the past we may have had correspondence but to whom we have not expressed our current views. The reasons for our changed viewpoint are: (1) scabies is a disease which is not capable of diagnosis by the layman; (2) scabies is a disease which, even under detailed directions for use, is not capable of treatment by the layman; (3) with the usual sulphur remedies there is considerable danger of widespread dermatitis. These reasons are those given by an overwhelming majority of the dermatologists of this country."

Despite this opinion no cases have been brought by the Administration against any product merely because it was claimed to be of value in the treatment of scabies. There are many in a position to know who believe that scabies can be successfully treated by self-medication.

The Administration has objected to the term "hair tonic," expressing the opinion that any product applied to the scalp would not have a tonic effect, and that this effect could only be obtained by internal administration of some substance that would affect the general system. However, the Federal Trade Commission does not object to the expression "hair tonic" if the product includes alcohol or some counter-irritant substance which would tend to cause tingling of the scalp when the product is applied; in other words, it would stimulate the superficial circulation.

(Continued on page 245)

PROGRESS IN HAIR COLORING

By RALPH L. EVANS, Ph.D.*

Part II

The Technical Problems in Dyeing Hair

Dyeing a coarse fiber like hair (see Figures 1 and 2) presents a serious problem because of the low ratio of surface area to volume. The resistance of keratin to penetration by solutions adds further to the difficulty. None of these technical handicaps, however, nor all of them put together are quite as complicating as the peculiar attachment that is located at the root end of the hair of a human female. Because of this handicap the dyer cannot immerse hair in a bath and cannot vary the temperature of the solution much above or below 38°C or 98°F.- He cannot use sharply irritating substances nor solutions of high or low pH and is limited chiefly to water and alcohol as solvents. Simple stains or paints that locate only on the surface and color all surfaces alike are unsuitable. Products that require a long time to dry or develop, like a varnish, cannot serve. Time of treatment is limited to about an hour and a half including preliminary and final shampoos if both are used.

Because most dyeing of gray hair is done for and by women, esthetic factors become extremely important. The operation itself must not be unpleasant nor too complex for either the dyer or the wearer. And finally and above all, when the proper color has been developed its presence must not be sensibly obvious, it must not coat the hair or alter its physical properties, and it must not interfere with or be altered by subsequent operations of hairdressing.

Thus, metal colors for hair, never as satisfactory in color value as organics, became less popular with the

*President, Evans Research & Development Association. Read before Scientific Section, Toilet Goods Association; Dec. 1948.

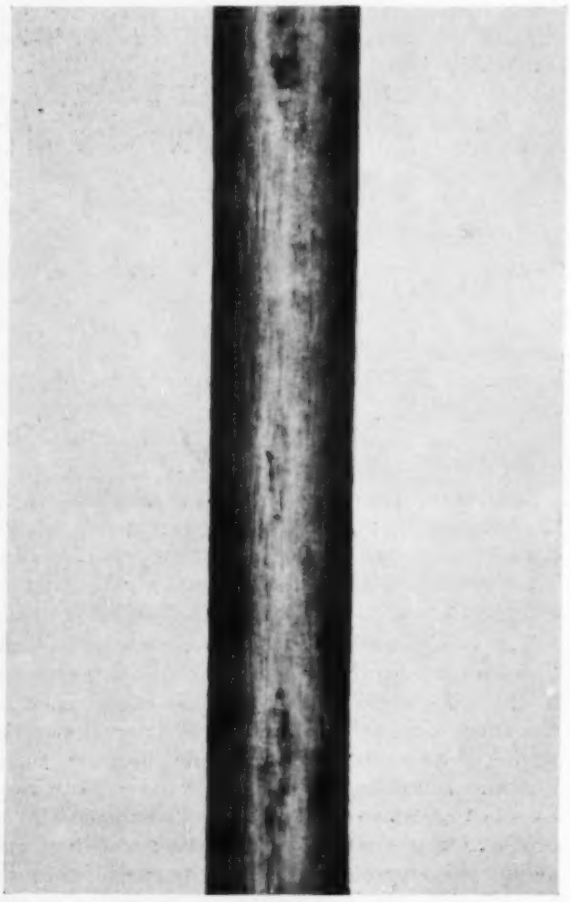


FIGURE 7
Untreated Hair Magnification 300X

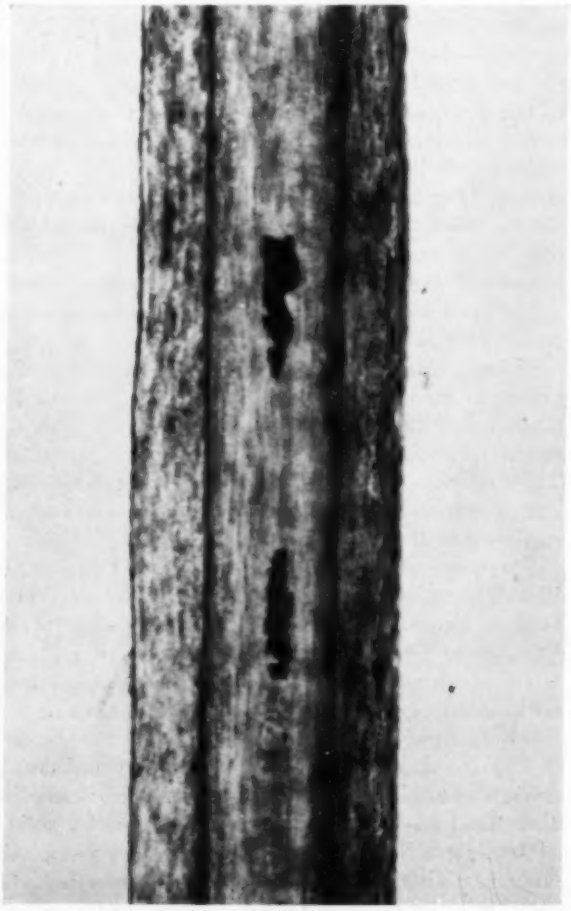


FIGURE 8
Hair after 2 Minutes in 3% Thioglycollate Solution of pH 12.5 Sharp Boundary can be seen at Diffusion Zone, Magnification 300X

FIGURE 9
Hair after 10 Minutes in 3% Thioglycollate Solution of pH 12.5
Boundary has disappeared. Diffusion has reached center.
Magnification 300X

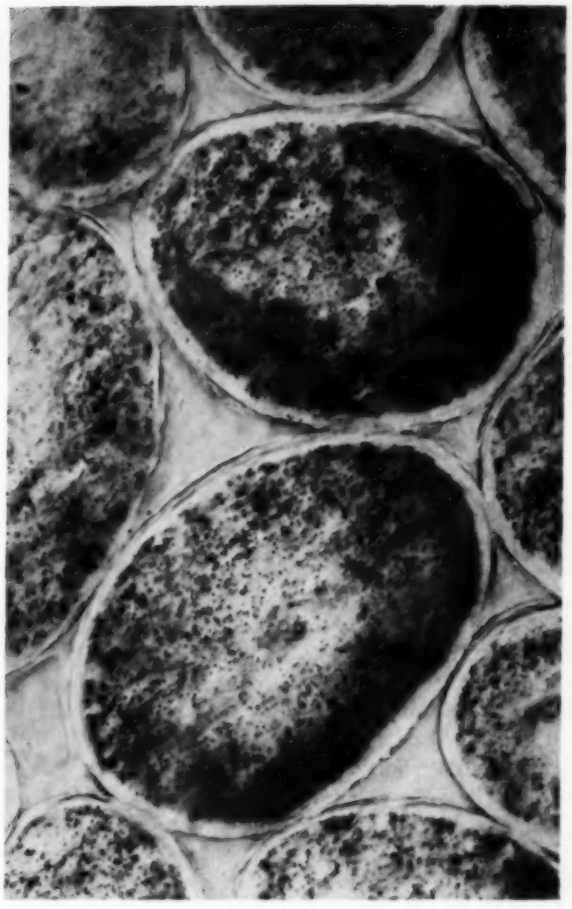


FIGURE 10
Cross-Section of Hair Showing Pigment Granules Magnification 670X

increased acceptance of the permanent wave. We understand this trend better today when we realize how metals, present in hair, can alter its properties by their influence on the cross-links of keratin structure. Their presence also prohibits the use of hydrogen peroxide because heavy metal ions catalyze the oxidation to destruction of the hair.

Keratin cross-links of disulfide can be opened by the use of alkaline oxidizers capable of diffusion into the keratin e.g. H_2O_2 to form anionic groups at S-S rupture.

The result is a loosening of the gel so that it swells more and the creation of more acid anionic points, perhaps sulfonates, where bases may be held in combination, much as in anionic exchange resins.

Oxidation type colors penetrate the hair shaft. Although most of the color of a dyed gray hair is located in an outer ring near the periphery, the microscope discloses that even there the color lies within and not outside the hair surface. Effects that result from the penetration of the coloring are extremely important. Thus light passes through translucent or transparent colored hair and is reflected from unchanged hair surfaces. Lustre or gloss and color-reflects both are preserved thus bringing out all of the beauty of natural appearance.

Few dyestuffs lend themselves to coloring hair by penetration. X-ray measurements of the keratin lattice structure indicate that molecules much larger than ethylene glycol penetrate keratin slowly if at all. The interatomic and interchain distances in hair can be altered by causing hair to swell in aqueous solutions at high pH values. As is shown in Figures 3-6, such swelling will promote absorption and diffusion of solute molecules into the hair shaft. But the degree of reversible swelling that may be resorted to without damage to the hair is limited and therefore the molecular size of the dyestuff that can diffuse within also is limited.

An interesting contrast is exhibited between the behavior of keratin with an alkaline reducing agent in reversible reaction and with an alkaline oxidizing agent in irreversible reaction. In the reduction, the reaction is the basis of the formation of a cold permanent wave and the hair is eventually restored to much the same condition as before treatment. In the other, oxidation irreversibly changes the sulfur to anionic groups open to attack by alkalis and thus the hair becomes easily swollen and structurally damaged by alkali.

In a search for replacements for p-phenylenediamine in hair dyeing compositions, the factor of change of

(Continued on page 222)

COSMETICS

Functions and Formulations

DEPILATORIES

By HARRY HILFER

PREPARATIONS which have as their function an ability to remove hair from the human skin have been the object of research and development for a long period of time. The old effective method of using a razor has some disadvantages not easily overcome. If the hair is to be removed from the legs for example, it is somewhat difficult for a woman to conveniently see every bit of the area needing treatment. The application of a cream which would do an effective depilation has therefore been regarded—and is—a saleable commodity.

The best approach was obviously via the use of a reducing agent, and metallic sulfides were in fairly common use for some time. The strontium salt particularly gave good results, but there were definite drawbacks inherent in the toxicity of sulfides to begin with and the odor of hydrogen sulfide accompanying depilation was not inclined to increase the aesthetic appeal of these preparations as cosmetics. The best preparations to date—all things considered—are the organic mercaptans, particularly thioglycollic acid. Thioglycollic acid is not a new entity developed primarily for use as a depilatory agent. It has had some small usage in pharmaceuticals and other products. Its development was therefore along these lines rather than a synthesis to fit a foreseeable need.

As often happens its use as a depilatory agent was patented for use along industrial lines rather than cosmetic. The use of thioglycollic acid as a means of dehairing of hides is the subject of a patent issued to the Rohm and Haas Co. Sometime thereafter patents were issued covering its use as a cosmetic depilating agent. The patents include other mercaptans as well as thioglycollic acid, principally thioglycerol, but thioglycollic acid seems to be the preferred depilating medium.

The manufacture of thioglycollic acid on a commercial scale is accomplished by any of a variety of methods. The classic method of treatment of sodium hydrogen sulfide with chloro acetic acid has been largely displaced by the reaction between chloro acetic acid and sodium thiosulfate, since the latter is more easily controlled. At any rate the thioglycollate is now commercially available as the acid or as its ammonium, sodium and calcium salt. In depilatories the calcium salt is the compound most usually used.

The best condition for depilation is in a highly alkaline one. Here is the primary difference between the conditions governing the use of thioglycollates for permanent waving and for depilation. When the optimum pH for permanent waving is in the region 9-9.5, the optimum pH for depilation is 10.5 or higher. The concentration of thioglycollate, surprisingly enough is higher for permanent waving than for depilation. Where a concentration of 4.6 per cent is required for waving, a concentration as low as 1.5 per cent is used in depilation. The pH factor in depilation is therefore as important as is the presence of the reducing agent.

These agents are extremely active reducing agents and are therefore easily oxidized by atmospheric oxygen. Any preparation in which they are to be incorporated should therefore be packaged in air tight containers. The collapsible tube seems to be the best thought of and is with few exceptions in universal use. The cream itself may vary with the properties its manufacturer desires to incorporate into it, but they must all have several properties in common.

It must be easily applicable, since this property of the preparation is an important factor in making its use preferable to the use of a razor. It must also be so formulated that the water incorporated into the emulsion will not evaporate at too rapid a rate, because depilation is not immediate with contact and a time interval of between three to ten minutes must elapse between application and depilation. During this time, depilation will take place only in the presence of water and it must therefore be present for best results. It must also be so formulated that it will be easily removed with water. The method of use of depilatory creams require that after application and the required depilation period the cream be removed with a wooden spatula. Though the bulk of it may be so removed, there is usually enough of a residue remaining which must be washed off with water. In the formulation of a vehicle of this type certain emulsifiers ordinarily used would not be effective here. We have primarily a system containing calcium salts which would automatically bar the use of soaps—due to their precipitation as calcium

soaps. Any esters would be saponified because of the relatively high pH needed for the proper efficiency of the vehicle, and they therefore cannot be used.

It is possible however to use bentanite or other fillers of this type so that a cream like consistency may be affected without the use of other emulsifiers. Cetyl stearyl or lauryl alcohols also may be used since these are not affected by the high pH. Many of the synthetic detergents may also be used here as emulsifiers, particularly the alkyl aryl sulfonates, since the true sulfonate is not affected by high alkalinity or by the presence of large amounts of the calcium ion. A true emulsion is a preferred vehicle to a suspension since it would be the better product insofar as aesthetic considerations are concerned. The method usually employed is to first make the cream in which the proper concentration of calcium hydroxide has been incorporated and to then add the thioglycollic acid when cool.

In any preparation containing thioglycollates any small amount of iron would be detrimental because it reacts with the thioglycollate radical to yield highly colored salts. Indeed, thioglcyollates are used as a test for minute amounts of iron since it is as sensitive as any other reagent for this purpose. Glass lined tanks would therefore be almost mandatory for any processing and extraordinary precautions must be taken insofar as raw material control is concerned to preclude the possibility of iron contamination.

The discussions so far have been confined to the practical considerations involved in thioglycollate depilatory manufacture—without much consideration of the theoretical considerations. As mentioned above successful depilation depends on a high pH and the presence of a reducing agent. Without going into too detailed a description of the hair structure it would serve to good advantage to show why these conditions are necessary. Cuticle removers with which we are all familiar are alkaline solutions placed on the cuticle so that they may be partially dissolved or partially softened to make their removal easier. The cuticle consists primarily of a chitinous layer which is easily attacked by alkali. The high pH in a depilatory serves primarily to allow partial destruction of the chitinous layer of the hair. This mechanism is coupled with the reduction of cystine to cysteine by the thioglycollate or other effective reducing agent and the combination of the two forces causes the hair to part at the follicle. The cystine-cysteine break may be illustrated graphically as—C—S—S—C———→—C—SH + HS—C— with a rupture taking place at the S—S linkage. This same reduction obtains in permanent waving, but without destruction to the chitin and with subsequent oxidation of the cysteine back to cystine. If the pH of the medium were high enough there would be danger of injury to the skin. The pH control exercised in the depilatory is calculated to avoid any such injury.

A further check against skin irritation is the ability of the vehicle to allow complete escape of water in a specified period of time so that for this reason the OH ions would lose their activity. If directions are followed faithfully there need be no need to worry on that score, but since there may be a greater than specified interval between application and removal, it is best that this method of OH ion inactivation be employed to render the product foolproof. Actually a six to ten minute period between application and removal is both adequate and desirable since it will usually take that length of time to apply the cream to both legs. Under these conditions, the removal of the cream by spatula may be begun immediately following complete application. Rinsing with water will then insure the removal of any residual alkali and reducing agency.

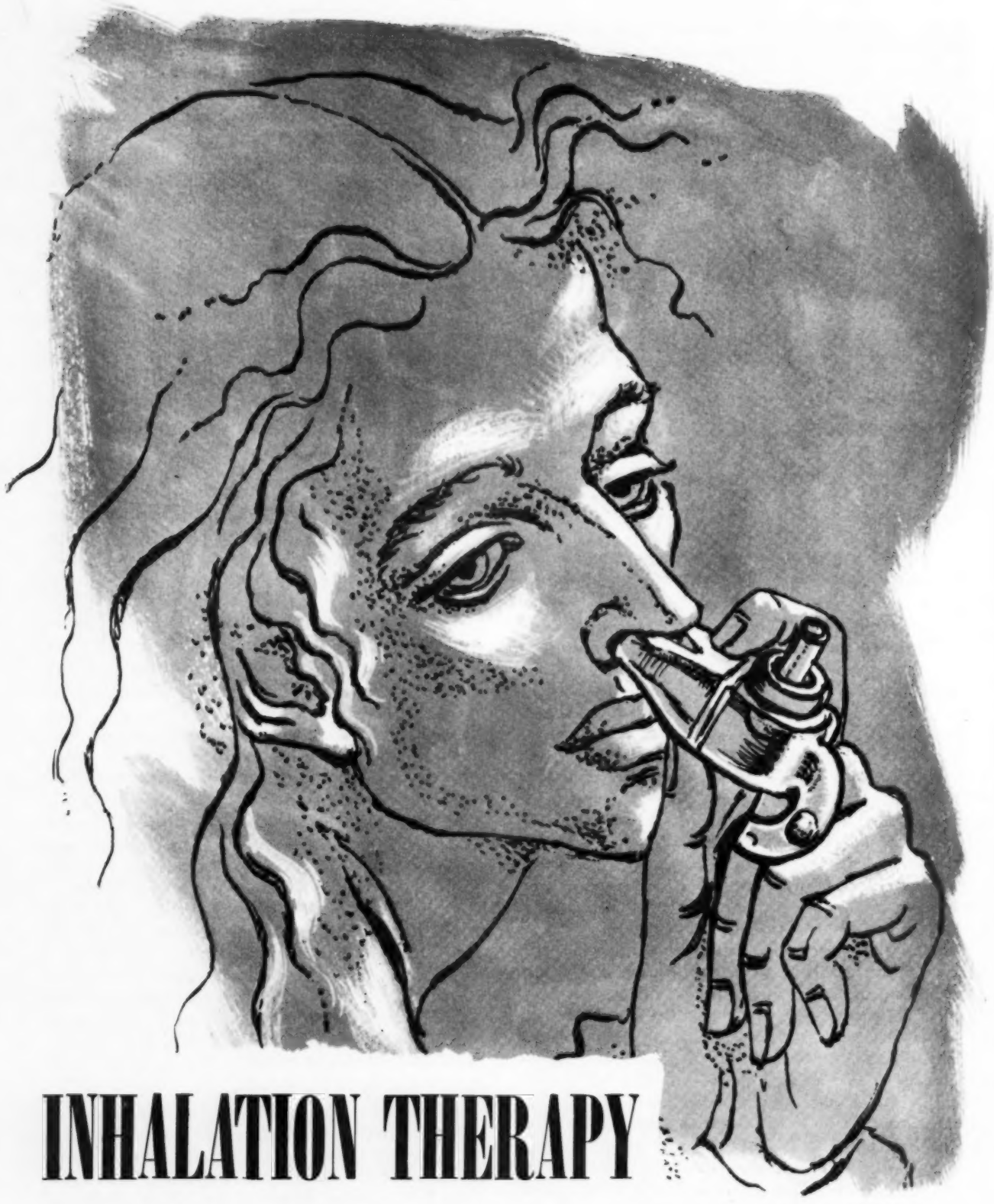
There are other reducing agents available which will have depilating qualities, chiefly the sulfides. Though the thioglycollate depilatories are the favored ones, there are still enough of the others on the market to make them a factor in this field. They therefore cannot be completely disregarded in a discussion of depilatories.

The sulfide depilatories suffer from two defects primarily the odor of hydrogen sulfide which accompanies their use and the toxicity of sulfides in general. On aesthetic grounds the thioglycollate is preferable because of the absence of the sulfide odor. Though there is an odor accompanying the use of thioglycollates, this is due to the degradation products of the hair caused by reduction and not nearly as offensive or as strong as is the odor of the sulfide depilatory. If these two facts could be overlooked the mechanism of the sulfides is just as efficient as are the thioglycollates.

Creams made with sulfides always carry with them their odor of H2 S another contradictory point to their relatively low sales. The thioglycollates on the other hand through having a well defined odor are not offensive.

As stated previously in the paper the use of thioglycollate salts and other incocaptan preparations is extensively covered by patents held by Evans and McDonough and by the Schering Corporation. Their use for this purpose must be legally agreed to by these agencies. It is the author's understanding that such an agreement could be made on a royalty basis, but if any reader be interested, these are the agencies which must be consulted. There has been some litigation regarding the validity of the patent, but so far the courts have expressed the opinion which has upheld their validity. As matters now stand, therefore, the use of thioglycollates is limited by the patents.

As would be expected, the sale of the depilatory is far greater in the spring and summer than in the winter. It has proved to be a boon to the girls who go through the summer without wearing stockings since they can keep their legs free from hair without any danger of inflicting scratches on them because of shaving. The use of the depilatory is spreading since their sales have been increasing from year to year and it is rapidly becoming a product of increasing importance in the complete sales picture.



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INHALATION THERAPY WITH ANTIBIOTICS

By M. A. LESSER

INHALATION therapy has attained amazing prominence in recent years. The use of penicillin and streptomycin aerosols and dusts is the newest and perhaps the most important chapter in the story of this method of treatment. Of course, inhalation therapy itself is not new. The practice of inhaling medicated vapors and smokes was known to the ancients. Its principles are employed every time a mother sets up a croup kettle to provide steam inhalation for her coughing youngster.

No longer an empirical practice, inhalation therapy has been the subject of considerable research and its employment now rests on a sound physiological foundation. Indeed, clinical studies indicate that inhalation therapy will assume a major role in the treatment of many types of acute and chronic respiratory conditions. In addition to studies on antibiotic aerosols research workers and clinicians have dealt with the use of carbon dioxide, helium-oxygen mixtures, aerosolized sprays of various therapeutic agents, and with certain other substances administered via the respiratory tract.[1]

The feasibility of administering penicillin by inhalation was noted by Bryson, Sansome and Laskin[2] in 1944. They cited several good reasons for the use of penicillin as an aerosol in the treatment of infections of the respiratory tract, particularly those caused by pneumococci, staphylococci and streptococci. Their views were backed up by studies which showed that penicillin aerosols readily penetrated the lungs, that the penicillin diffused from the respiratory tract into the blood stream, and that the penicillin so administered was excreted in the urine. They also observed that as much as 250,000 units of penicillin per cc. could be nebulized and inhaled without lung injury.

Some months later, in 1945, Barach and his associates[3] confirmed these findings and further reported that the inhalation of penicillin aerosols was a practical clinical procedure. They also found that most Gram-positive organisms were consistently absent from the sputum during penicillin aerosol therapy. They likewise reported that certain respiratory infections were benefited by such therapy.

In the light of these and other observations, it is not surprising that the inhalation of penicillin aerosols soon found widespread and quite enthusiastic employment in the treatment of respiratory infections. The principal arguments in favor of such therapy are simplicity and economy as compared with parenteral therapy, and the possibility of direct antibiotic activity against susceptible organisms found in the lower respiratory passages and the perinasol sinuses. As noted by Prigal and his associates[4,5], this method brings the penicillin in concentration where it is needed most, and yet sufficient penicillin can be absorbed into the blood stream to produce a twofold attack—both local and systemic—on the infection. Their studies indicate that the inhalation of penicillin aerosol may be used to replace penicillin injections, which would be of special advantage in the treatment of infants and children, or when prolonged treatment is necessary as in sub-acute bacterial endocarditis. Indeed, in respiratory infection, penicillin aerosol may even be effective where the parenteral route has failed.

In his report on penicillin inhalation in respiratory infections, Morse[6] went into considerable detail on the advantages of aerosol penicillin. In summarizing his observations, he pointed out that such use of penicillin provides a cheap, safe, painless method which is generally applicable to home use by untrained persons. Aside from the fact that penicillin inhalation is an effective treatment in many respiratory infections, including those of the nasopharynx, Morse felt that the procedure had great possibilities as a preventive medicine. While dosages have not been definitely determined, small doses have proved efficient.

The inhalation of aerosolized substances permits the topical application of potent agents to remote portions of the upper and lower respiratory tract. In inhalation therapy with penicillin and streptomycin the primary objective in most cases is to obtain a high local antibiotic effect. As observed in the report of Segal, Levinson and Miller,[7] the maintenance of a constant high level of penicillin in the blood is not essential in purely local pulmonary infections without bacteremia. Topical penicillin levels, they feel, can best be attained by administering concentrated doses several times daily. Similarly noting that inhalation therapy is topical therapy rather than systemic therapy, Abramson[8] observes that vasoconstrictors are often added to the penicillin to prevent rapid absorption and high blood levels. Slow absorption also results when penicillin is inhaled in the form of a dust rather than in solution.[9]

As already indicated, however, it is sometimes advantageous to maintain a high blood value as well as a high local concentration of the antibiotic. It has been shown on many occasions that effective penicillin aerosol therapy can provide good topical effect as well as adequate blood levels.[10] The studies of Mutch and Rewell,[11] for example, have provided considerable useful data. Working with a group of normal subjects who inhaled a penicillin aerosol, they found that the blood concentration curves were similar to and intermediate between the curves reported for the intramuscular and intravenous routes. At least 25 per cent of the mist was absorbed from the respiratory passages. This, of course, did not mean that the rest of the penicillin was wasted, because a large proportion of this penicillin may act topically without absorptive blood or urine levels.

More recently, Barach and his co-workers[12] reported that the inhalation of the crystalline sodium or potassium salt is followed by higher concentrations of penicillin in the blood than is obtained with the usual calcium or sodium salts. Prigal[4] found that the inhalation of penicillin-propylene glycol aerosols resulted in excellent therapeutic blood levels of penicillin; these being maintained for five or six hours.

Of course, as with most therapeutic measures, there are certain limitations and even some contraindications

to the inhalation of antibiotics. It is obvious, for instance, that treatment by inhalation is contraindicated in those infections of the respiratory tract which are not susceptible to the action of the antibiotics. It is also evident that such inhalation therapy should not be used for the exclusive or primary treatment of conditions requiring therapeutic blood levels. In such conditions, inhalation therapy may prove of value for its topical effect.

Systemic, toxic or allergic manifestations are not too frequent. A few patients treated by Barach and his associates[3] complained of soreness under the sternum and an irritated throat after treatment with aerosol penicillin for a few days. Coughing sometimes was troublesome. Commenting on this last symptom, Vermilye[13] observes that in his cases the coughing was a normal physiologic manifestation of the disease rather than a reaction to the inhaled penicillin. Other workers[7] have occasionally observed local and generalized reactions to penicillin inhalation therapy. These consisted of edema of the lips or mucosa of the mouth and, in some instances, the development of a generalized urticaria. The local reactions cleared up after changing to another type of penicillin. The method may be contraindicated for patients with known or suspected penicillin sensitivity. In such cases preliminary or concurrent medication with some antihistaminic drug may permit the use of penicillin aerosol.

In his comprehensive discussion on the principles and mechanism of inhalation therapy, Abramson[8] defines an aerosol as a relatively stable suspension of solid or liquid particles in any gas (including air). It is now generally recognized that the effectiveness of inhalation therapy depends on the size of the particles in the aerosol. Bryson and Grace[14] cite experimental evidence which indicates that, in order to penetrate to the smaller bronchiales and alveoli of the lungs, aerosols must be composed of small particles of 5 microns or less in diameter. They point out that large particles are undesirable, except for the treatment of infectious tracheitis, laryngitis and other diseases of the larger respiratory passages. Therefore, it is necessary to distinguish between the ordinary commercial atomizer, which produces relatively large droplets, and the nebulizer, which is constructed with some intermediate baffle to break larger particles into smaller droplets.

During the last few years, various modifications have been made in the nebulizer apparatus as well as in the technics of inhalation. These modifications have been designed to serve various functions, such as the conservation of penicillin, to give the highest possible local deposition of the drug, to insure maximum absorption into the blood stream, to increase the comfort and ease of inhalation, and to decrease the incidence of local penicillin reaction.[15]

Through the combined efforts of clinicians, bacteriologists and technicians effective and efficient devices and technics have been developed for inhaling penicillin aerosols. Details on the construction and mechanism of many of these devices are available in the medical and technical literature[8,12,15-21]. Many of the technics have employed compressed oxygen in tanks, with suitable valves for pressure control, connected with nebulizers, which in turn are connected with oxygen masks or inhalers of various types. Other methods have employed hand or electric pumps to provide pressure for nebulization. However, good results have also been obtained with simple, inexpensive hand nebulizers capable of delivering a fine spray. The development of such simple apparatus has permitted the wider use of inhalation therapy with antibiotic aerosols in both the physician's office and in the home of the patient.

Because persistence of the fine mist is an important characteristic, various attempts have been made to stabilize the aerosols. One method devised by Prigal and his associates[5,19] has attracted much attention. They found that penicillin dissolves readily in propylene glycol to form an effective, stable aerosol. It also was noted that the addition of glycerine further stabilizes the aerosol. In one series of investigations, penicillin was dissolved in 20 cc. of propylene glycol to which was added 2 cc. of glycerine. Conservation of this aerosol was obtained by confining it in a limited space, such as a small chamber, a tent, or a breathing box. The type of confined space was the determining factor in the number of units of penicillin added to the glycol-glycerine vehicle. Thus, for the tent, 100,000 units were administered twice daily, for the chamber 200,000 units, and with the breathing box, 50,000 units. Other observations have shown that not only is propylene glycol a good vehicle for the penicillin aerosol but that it also serves as an adjunct in increasing the antibiotic properties of the blood.

Of pertinent interest is Abramson's[8] statement that when strong penicillin solutions are nebulized, it is unnecessary to add materials like glycerine because the penicillin itself apparently acts to stabilize the particle size distribution. The behavior of strong solutions of streptomycin is similar to penicillin.

Lately, considerable interest has centered about the inhalation of finely pulverized or micronized antibiotic powders. The work of Krasno, Karp and Rhoads[9,22,23] indicates that this newer method of administering penicillin is more effective than other aerosol methods in ridding the upper respiratory tract of Gram-positive organisms. Aside from its effects on the organisms of the nose and throat, the administration of penicillin dust as a solid aerosol exerts a rapid and beneficial effect on the bacterial flora of the tracheobronchial tree. The best results with penicillin dust inhalation were obtained in cases with acute upper respiratory tract infection, but there was also definite improvement in patients with chronic sinusitis and nasopharyngitis. In other studies which demonstrated the value of this form of medication, Taplin and Bryan[24] found that patients prefer the dust inhalations to injections or other kinds of inhalation therapy.

Aside from other superiorities claimed for this form

(*Continued on page 248*)

CANNED SUTURES

The top picture shows the old way sutures were packed as compared with the new method (center) where they are hermetically sealed and do not have to be sterilized. In the bottom picture the new canned sutures may be carried to the operating table without any lapse for sterilizing.

NURSES in a 500-bed hospital spend about 2,210 working-hours-per-year (a conservative estimate) scrubbing and boiling the outer surfaces of tubes and ampoules in which surgical gut is packed. But this year, many nurses will be free to use these valuable hours for more valuable assignments. A new sterile pack of sutures has arrived in hermetically-sealed cans. Packed upright like cigars in 6 dozen units, these suture tubes come in key-opening metal containers bearing the lithographed label of the Ethicon Suture Laboratories, a division of Johnson & Johnson.

A surgeon who picks up a suture tube must be sure that its surface, like its interior, is not contaminated. He might transfer this contamination to the sutures when he breaks open the tube and removes them. Hitherto tubes of surgical gut have reached the hospital packed in cardboard boxes. Nurses are required to open the boxes, sterilize the tubes, and place them in glass jars filled with sterilizing fluid. The new hermetically-sealed can eliminates the need for sterilizing and takes over for the glass jar. It is a factory-sterilized package which nurses can carry directly to the operating room.

The label, lithographed directly on the metal walls of the container, carries the maker's name to the scene of operation. Yet Ethicon wisely realized that in an operating room the name of the product was more important than who made it. The word, "Sutures," has the boldest lettering on the smooth grey surface of the can. The label also accounts for the type and size of the sutures inside the can.

Like a coffee can, the container has a key opening cover—but one which you discard when you open the can. Ethicon supplies, for re-closure, an auxiliary top which was adopted for practical reasons. A nurse in the operating room is not free to open the can with two hands, like the housewife who reopens a can of coffee. While the nurse opens the container with one hand, she must hold in her other hand the forceps with which she picks up the suture tubes. The auxiliary tops are handily opened with one hand. They are chrome-covered, sterilizeable, and re-usable.

The packing process for Ethicon's sutures is essentially simple. Cat gut strings are wound by hand on tiny fibre reels and inserted into the tubes which are marked with loose but boilproof labels. In perforated metal containers, the tubes undergo steam sterilization

(*Continued on page 255*)

FIFTY THOUSAND WAYS TO

By FRAZER V. SINCLAIR

PERFUMES and cosmetics can be, and are, sold in a greater variety of ways than the products of any other industry. That is a pretty broad statement. But it can be supported by a quick glance at the methods used by the numerous individuals who enter the trade each year. It can be demonstrated more clearly by a brief discussion of some of these many ways.

Nearly every one who starts a perfume or a cosmetic company does so because of some personal advantage, or some plan for distribution. There are, of course, some people each year who have a package design or a package novelty which they are convinced will capture immediate retail and public interest. Some do.

There are a limited number of others who appear with a new type of product, a new element added to a standard product, or a new use or application. Some of these, who have been alert enough and smart enough to adapt to cosmetic use some new discovery from the entire field of chemical research, let's say in leather processing, may start with a basic product advantage and so be able to proceed along traditional lines in distribution with quick success.

These two broad ways of entering the perfume and cosmetic business, i.e. package or product, have industry value, are responsible for numerous successes and, when they have some merit, usually receive retail favor. Through most of the year, in fact except for the Christmas season, retailers incline to welcome the new, the novelty and the deviation from standard. They help stop traffic at the perfume and cosmetic counter.

But it is in the apparently innumerable ways of selling perfumes and cosmetics that the wide field of opportunity beckons to so many people. Except for the fact that all of these people and every one else in the industry are competing for the same dollar in the consumer's pocket, many of the methods of selling are basically non-competitive.

Anyone who wants to start a perfume or cosmetic business with an idea or an advantage in distribution has excellent industry facilities that will relieve him from formulation, manufacturing, technical control, packaging and shipping. The industry has a number of reputable private label manufacturers who assume all or part of these functions. The newcomer can concentrate on his particular advantage or sales plan.

Several broad avenues of distribution, each with apparently unlimited methods of locomotion, are open to him. These are:

1. House-to-house selling.
2. Beauty Parlors
3. Barber Shops
4. Retail trade
5. Mail-order (so far incidental)

Except for the few large catalogue houses, the sale of perfumes and cosmetics by mail has opened few opportunities and attracted little or none of the venturesome newcomers. Yet people do buy nearly every product by mail. There is a startling increase in mail-order buying, even in the largest cities.

Some few cosmetic companies have a profitable sideline of mail-order business, which has grown like Topsy, without nursing or care, from customers who like their product and have moved to communities where it is not available. One small company, operating with a limited number of fine, selected salons, has a world-wide mail-order business for a cream used in their salon treatment. Since there are so many variations for possible success because of specialized class appeal and service in other forms of selling, it seems rather remarkable that this formula has not been used in perfume and cosmetic selling by mail. When Mr. Edison sold watches to other railway telegraphers by mail, he established a class appeal which created confidence and he sold a good product which these people particularly needed. Definite variations of this theme should be possible for cosmetics by mail.

The Beauty Parlor and the Barber Shop are each distinct entities in the cosmetic business, largely non-competitive with each other and with the rest of the industry from the viewpoint of products and distribution. Each provides outlets for over-the-counter sales of packaged goods, as well as bulk sales for service.

Since most of the variations in selling procedure used in the retail trade can be applied to these two branches of the cosmetic industry, further discussion of these varied methods of selling will be kept for the retailer.

House-to-house selling is old or older than retailing. The early Yankee peddler often had something in his pack that could be called a cosmetic. In modern America, selling in this way has proved to be one of the most hazardous ways of doing business. Yet the leader in house-to-house selling in cosmetics has grown proportionately faster, in the last decade, than the average for the industry and stands out conspicuously as the leading growth company in the industry.

Originally, the so-called Wagon Companies, operating in country districts, were the primary examples of cosmetic house-to-house selling. These were followed by largely specialized, full-line cosmetic companies.

These large cosmetic companies conform to no single formula. Some are territorial, some combine other packaged products with cosmetics, nearly all have an individual, highly specialized method of handling their sales force. Their substantial growth over the last sev-

eral years lies in the fact that they alone, in all the industry, still had some place to go. The discovery that women in cities will respond so readily to informed selling and convenient shopping, opened to these companies a new and bigger world to conquer.

The cosmetic demonstrator has been the single, most effective force in cosmetic selling. Largely controlling the sales of perfumes and cosmetics in most of the heavy-traffic, competent retail stores, she has laid the educational foundation for treatment, make-up and other cosmetic usage which has seeped down through the population.

House-to-house selling, in effect, transfers the demonstrator from behind the counter to the home. The difficulties a large company faces in procuring good sales personnel, in training them, in avoiding too great a turn-over and above all, in using economically anyone of unusual ability in demonstration and selling, dilutes the effectiveness of the house-to-house agent as compared to the retail demonstrator. Probably these companies will find a way to provide a sufficiently large audience to a highly trained, skilled demonstrator, who will serve as a community focal point for product education, just as leading retail sellers have historically done.

TO SELL COSMETICS

It is in the application of skilled, specialized demonstration that opportunities in house-to-house selling for the newcomer lies. Two examples show the infinite variety.

For some years a small business, which consisted of one man and an automobile, made a very respectable income by specializing on the firemen and policemen of one of our largest cities. The calls were confined to fire houses and police stations. The products were his own brand of shaving creams, soap and other shave accessories and included a limited line of utility cosmetics for women. This man proved that specialized contact built confidence in a good product. He also proved that men will buy cosmetics for women when a good product is once established by a gift.

An even more interesting example of specialization is the ex-nurse who has a line of cosmetics for nurses. By constant calling at hospitals, she has convinced a very profitable following that her brand of cosmetics are best suited for nurses.

Many people have tried to introduce the medical or clinical theme into house-to-house selling. Nearly every woman is willing to believe that her particular cosmetic problem is different and will respond with flattered pride to a personal appraisal that is conducted with professional semblance. Most of these methods have failed, partly because the unit sale in house-to-house selling cannot support an elaborate procedure. The registered nurses, who were trained earnestly to examine and prescribe for the lady in her home, soon found that their income in this time-consuming procedure was considerably less than in nursing. The company who sent clinicians to fill out long tedious questionnaires, which would then be analyzed by a consulting physician who would prescribe suitable cosmetics, found also that the unit sale would not support this cumbersome chain.

But there are some companies using moderate variations of this theme. The most successful company selling to the retail trade bases its selling primarily on a specialized, cosmetic consulting service. There is no doubt that economical, localized variations of this principle can be used with success in house-to-house selling.

Because perfumes and cosmetics have no retail trade of their own, they have been forced to seek hospitality among the retailers of other trades. This is probably why there is such constant exploration in diverse retail channels.

Some perfumer will periodically make the great discovery that jewelers could and would be delighted to sell perfumes; men's toiletries manufacturers had their day of excitement with the haberdasher; children's cosmetic makers went all out for the children's wear department; the limited apparel specialty store bowed in, and to a large extent quickly bowed out.

There are few opportunities in retailing perfumes and cosmetics outside the established, traditional retail channels. Other retailers, such as the jewelers, men's shops, apparel shops have their own particular problem of building a clientele by means of a specialized reputation. Like the Beauty Shop and the Barber, they normally have services or products of much higher unit value to take precedence in the sales clerk's time.

This does not mean that these retailers are excluded entirely from perfume and cosmetic selling. Some few in each group have found these products a small profitable side-line. A few small companies, using the retail franchise formula as an inducement for specialized attention, have won a little corner for themselves in this way. Several well-established companies, now important factors in the general retail trade, made their early start and secured a firm initial position by avoiding the heavy, competitive concentration in accepted cosmetic retail channels and by working in intimate cooperation with the smaller, specialty apparel stores.

But the opportunities here, experience has shown, are very small. The manufacturer must be content with a small "sleeper" business or plan deliberately to use these outlets as a difficult springboard to the place where perfumes and cosmetics are traditionally sold.

There is one probable exception to the traditional retailing of cosmetics. That is the food super-market. The rapid spread of cosmetic departments in these stores seems to parallel the quick acceptance of this department in variety stores twenty-five years ago.

The cosmetics sold in super-markets should, in most part, be more properly called toilet articles. They are largely the utilities of the trade, in character, brand and price. Since they are predominantly "demand" items, backed by mass advertising, probably little opportunity will exist here for the new company or the small company.

In the past twenty years a number of cosmetic companies have been founded on the basis of exclusive distribution through the powerful grocery chains. A few of the great chains seemed to like this idea. They found the public strangely uninterested.

There are so many different ways of selling to the retail trade that it is difficult to classify these variations. Many of these methods overlap.

The three primary classes of retailers for perfumes and cosmetics are:

1. Variety Stores
2. Drug Stores (chains and independents)
3. Department and Specialty Stores

Perhaps a basic method of classification, as an attempt to show variations in selling methods would be by (1) mechanical variations in distribution and (2) variations in promotion. Even here conflict is usual and inevitable. Mechanical variation may be:

(1) Specialization:

Specialization in the sale of perfumes and cosmetics to a retail class is a frequent and in many cases a highly successful sales method. It is primarily an appeal that has potent force with the class conscious department store. It could have appeal to the drug store, but they have rarely been able to do anything about it. From a sales or prestige view-point, it is apt to leave the variety store management rather cold, but from the view-point of specialized production, specialized advertising and promotion it has been proved many times a successful sales approach.

The department store is a high cost operation. Normally, a department store will spend far more money in advertising in its community than any national advertiser. Its name is usually an established household word in its city and surrounding territory. Because such a store has a real ability to sell merchandise —to introduce it—to help build its reputation, to establish it as a habit among part of the store's regular clientele, there is often a natural reluctance and jealousy to go all out for any product which may be widely distributed. This reluctance becomes particularly active when distribution is extended to the kind of stores which do no creative selling to expand the market, but really trail the department store to intercept repeat purchases.

Specialization is in part a retail franchise and in part a direct class appeal to a class conscious group of retailers such as the department stores.

A few very successful cosmetic companies make and stress this class appeal. A larger number of smaller companies, combining this appeal with a retail franchise, or exclusive representation, are receiving extraordinary store cooperation and are doing an annual volume per store which is hard to believe. Among all the "sleepers" in the trade, and there are many, some of the most startling operate in this way.

(2) Patterns of Distribution:

As a method of selling, that is, as a persuasive argument to retailers for stocking and cooperative selling, the pattern of distribution is closely allied to specialization and retail franchise. It gives the manufacturer more scope and flexibility. It can only be used for a perfume or cosmetic in the higher price, prestige class, and in selected selling.

Retailers are vividly conscious of the pattern of distribution for a well-known product. This pattern, which retailers often sense or understand with fair accuracy, does much to establish in their mind the compatibility of a certain product with a certain kind of store.

It is for this reason that leading fashion stores, less than 100 nationally, are so besieged for initial distribution, for window and counter space, for demonstration space and, above all, for cooperative newspaper advertising. It is not only the recognition of this leading retailer for the product that is desired, but very often of much greater import is the establishing of a pattern that whets the appetites of lesser stores "on the make."

A pattern of distribution is one of those intangibles that can at times be a very potent force. It is difficult to apply as a method of sales. Some few years ago a new cosmetic company secured national distribution in 125 of America's best stores before the product was completely packaged and before any advertising plans were made.

This company had an excellent reputation in a closely allied trade. It had a reputation for skilled promotion and enough had been done on packaging to show that the line was well designed and balanced. But what closed the sale long before the product could be shipped was a well thought-out plan or pattern of distribution. This pattern was a three-year program of expanding distribution in three limited cycles. It offered the 125 retailers, who were asked to sign up for the first year, an exclusive territory franchise for the first year, a permanently limited franchise and a product-store compatibility as a permanent guarantee.

(3) Retail Franchise:

The retail franchise, for a product of merit, is the one single most effective way of securing a retailer's interest, of starting in business, of operating a small or moderate size business, of making a comfortable profit and many other nice things.

The principle behind the retail franchise, is the often

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COD LIVER OIL

By HARRY G. KELBLY

P. R. DREYER

ATTENTION was focused on the cod liver oil market by the recent decline of 20c per gallon which established the New York price to bottlers' consumers at $2.40 per gallon. When compared to a normal pre-war price of from 60c to 70c per gallon it is rather startling to note that this commodity is still four times above what it cost to import less than 10 years ago.

There are several factors which explain why cod liver oil has remained at abnormally high levels when for the most part imported raw materials have declined in price. There have also been numerous developments in the most important consumer markets of the world which would indicate a return to a more normal price level for this valuable source of natural vitamins A and D.

The carryover stocks of cod liver oil in Norway are small at this time. Norway's production in 1948 was only about half of the high level of 10,000 tons the preceding season. There is little carryover stocks in either Iceland or Newfoundland. Inventories in this market are unknown but it is important to note that imports of cod liver oil into the United States during the first half of 1948 increased by more than 27 per cent over the total for the like period of the preceding year. Such imports in the 1948 months under review amounted to 8,350,488 pounds, compared with 6,535,013 pounds in the first 6 months of 1947.

These are factors which have influenced source markets to maintain very high export prices and to maintain and tighten government export controls. In Norway, government officials meet periodically during the year with refiners and after a careful check of all factors in consuming markets set an export price at as high a level as they believe the markets will bear. A government tax is included in the price set. Exporters must collect this tax which is used to subsidize the fishing industry. The government buys nets, fuel oil, boats and other fishing equipment and resells to the fishermen at prices below cost.

What American importers would like is an export price based more nearly on the cost of production, and not on what the trade will bear, and also on an endeavor to obtain as much dollar exchange as possible. Inflation exists in Norway as it does practically everywhere else but this can hardly account for the fact that cod liver oil prices are 400 per cent above pre-war level.

What foreign authorities apparently fail to take into consideration when establishing the export price of this material is that commodity prices in the United States are declining, and also that various substitutes have materially reduced the demand for cod liver oil.

Although production in Norway last year was bad, it is estimated that world production of cod liver oil is now about equal to that of 1938. Some quarters expressed the feeling that in so much as cod liver oil is a by-product of food fishing operations, and demand for food fish of the arctic and subarctic types will remain heavy in view of the world need for food, the supply situation should remain fairly stable with respect to future outlook.

British cod liver oil producers stated that their output has returned to pre-war levels and will probably increase so long as the market for fish holds. German producers are expected to resume operations, but are not expected to meet local demands for a long time.

(Continued on page 244)

NEW PERFECTION = DROPPING PARTS

QUALITY UNIFORMITY CLEANLINESS SERVICE

1
Non-rolling, extra-depth, Bakelite Cap; thick flange rubber bulb; Saftee ball glass.

2
Non-rolling, extra-depth, Bakelite cap; thick flange rubber bulb; special bent glass (CALIBRATED in color).

3
Regular plastic cap; thin flange rubber bulb; semi-blunt glass.

4
Single shell metal cap; oil-resisting Amekine synthetic rubber bulb (without strong odor); blunt glass.

By the Originators and World's Largest Manufacturers of Screw-Cap Dropping Parts

Since 1931, when the screw-cap dropping part was originated by Pennsylvania Glass Products, the world-wide acceptance of New Perfection has been increasing. It has been due to our earnest adherence to this creed: In supplying the exacting pharmaceutical trade with this important dispensing item, exacting standards for quality, uniformity, cleanliness and service must be observed. . .

Today, our unquestioned world leadership in the distribution of the screw-cap dropping part, and related products, proves we have succeeded in producing and selling *the best*. Our reputation is assurance that each order, of whatever size, will meet the most rigid specifications.

New Perfection dropping parts, either plain or CALIBRATED IN COLOR, can be supplied to fit your bottle or with our new Modernistic style bottles. Our bottles are available in Amber, Blue, Green or Clear glass in 2 cc, ⅛, ¼, ½, 1 and 2 oz. capacities. Special oil-resisting AMEKINE synthetic rubber bulbs can be supplied for use with oil products, or natural rubber for general usage.

Write for Samples and Quotations

PENNSYLVANIA GLASS PRODUCTS CO. INC.

"GLASS GOODS OF THE BETTER KIND"

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PACKAGING and SELLING

HAIR WAVES

ACCORDING to Toni, the women of this country saved $150,000,000 in 1948 by using the home wave to keep their hair in curls. This estimate is based on a comparison of the cost of $1.00 for a home wave and an average of $6.00 as a cost of a beauty shop permanent.

Toni thinks that six out of 10 women now use home waves, and that they have an approximate 85 per cent of this market. Their sales in 1948, they say, exceeded 30,000,000 kits.

As the business for the home wave grows, with Hudnut now a substantial factor doing over $7,000,000 in 1948, with Lever Bros. entering the market with all the heavy artillery of radio, magazines, newspapers and trade magazines, and with other large companies standing on the bank already to jump off, the beauty parlor is trying to repair the broken dam with legislation and court cases. Bills against the home wave kit have been introduced in over a dozen state legislatures and efforts in every direction have been made to prosecute women for practicing beauty culture on relatives and friends without a license. So far these bills and efforts have been met with very cold interest.

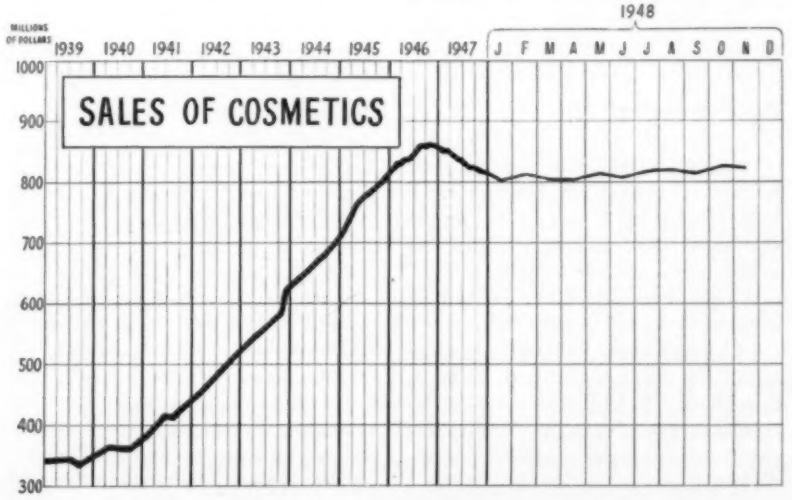
A Kentucky judge observed that according to the hair dresser's theory if women wave hair, depriving beauty operators of revenue, a woman washing her own nylons is doing the same to laundries.

The Attorney General of Florida said that it was absurd to interpret a state law so that members of the same household could not give each other home waves or shampoos.

There will be a large number of anti-home wave bills introduced in 1949. A Massachusetts bill would allow only licensed beauty parlors to sell cosmetics containing certain chemicals used in permanent waves. The effort of beauty parlor operators to establish a professional claim to a monopoly for selling, dispensing or employing a product that may be classified as part of their profession could have reverberations extending beyond the narrow limits of this one product.

So far this legislative battle is having a tough up-hill fight against ridicule, lack of interest, and a plain recognition that this is basically a competitive fight between professional service and self-application. It is possible, however, that the first round has only begun.

Retail sales of cosmetics for the twelve months ended with November 1948 amounted to $822,478,000. This compares with $826,555,000 for the twelve months ended with October 1948 and with $825,312,000 for the twelve months ended with November 1947.



Drug Store Statistics

Recent research of the Curtis Publishing Co. gave a great deal of interesting information regarding retail drug stores.

Although sales have increased enormously since 1940, the number of drug stores has actually decreased by 2,000 stores. This publisher found that at the end of 1947 there were 55,876 drug stores and that sales rose to a total of 3,616 million dollars.

The average drug store in 1947 did a business of $64,700 as against $27,000 in 1940. In 1947 drug store sales averaged $25 per capita, with a low of $14 in Mississippi and a high of $39 in Colorado.

Consumer markets for drug store products consisted of 36,240,000 families and 9,210,000 single persons. The professional market consists of 157,620 physicians; 79,760 dentists; 6,262 hospitals and 9,414 veterinarians.

Hold on to Your Hats, Boys

It is not startling to find two of the principal national government executive departments talking at cross purposes and, in fact, apparently pursuing diametrically opposite courses.

Americans have come to accept this sort of thing the way they do tornadoes and the periodical occurrences of certain infectious diseases.

We have recently seen an exhibition of an anti-monopoly drive particularly directed toward the kind of company the innocent public has believed was performing a very useful function in continually lowering prices and increasing quality.

Three of the most recent cases have been the electric light bulb, cellophane and telephone service. Now we read

that a prominent member of the Department of Commerce, speaking at the annual convention of The Wholesale Dry Goods Institute, said "Selective Distributorships lessen competition on the lines carried and should therefore be sought by wholesalers."

Do not worry if you feel bewildered. It is universal.

Rayve

The Pepsodent Division of Lever Brothers now has underway an extensive campaign for Rayve Home Permanent Kit.

A heavy campaign of advertising is being used in over 200 newspapers. Selective announcements will be used on 90 radio stations. Four-color pages are scheduled for nine national magazines, and a substantial trade magazine schedule is included.

Plans are, according to news reports, to sell the Rayve Kit in 60,000 drug, department and variety stores throughout the country. The kit is priced at $2.00, with refill kits at $1.00.

This intensive advertising drive and a projective distribution that is the last word in mass selling will place Rayve in a direct competitive class with Toni rather than with the next contender, Hudnut.

Jergens New Advertising

The Andrew Jergens Company plans to spend in 1949 a little in excess of the $4,000,000 for advertising which were spent in 1948, terminating a 16 year sponsorship of Walter Winchell. This advertising appropriation will include magazines and newspapers, together with a current radio show. In an effort to expand their audience, farm journals will be added for the first time.

The products which will receive the bulk of this advertising are Jergens Lotion, Jergens All-Purpose Face Cream, Dryad Deodorant, Woodbury Soap, a new line of Woodbury face creams, which will retail from 20 cents to $1.39 and Woodbury Face Powder.

Sincere Enthusiasum

Newspaper reports from England tell us how enthusiastic Britains are flocking to receive the free wigs, glass eyes, and other artificial appendages that are being distributed free under the National Health Service.

We suppose it is only natural that in regard to this new beneficent Santa Claus, the National Health Service, that those who receive a free glass eye will be blind to all faults, the receivers of free hearing aids will be deaf to all criticisms, those decorated with new false teeth will be vocal in defense, and those who receive a new free wig will be quite willing to split hairs in defense of this new social progress.

Retail Sales Efficiency

Probably the most general complaint against the retail trade during the last several years, by both the shopping public as well as manufacturers' sales force, has been the indifference of the retail sales person.

Now a management survey, covering 40,000 individuals, comes to the conclusion that retail sales people are only 71.4 per cent efficient. When it is considered that a grade of 100 merely represents the performance which every store expects to tender its patrons, and which every customer expects to receive, this 71 per cent of just an average normal expected performance isn't so very wonderful.

Where the salesgirl or the sales clerk really falls down very badly, according to this survey, is in creative rather than in routine selling. For instance, clerks rated 87.6 per cent in securing attention, 84 per cent in establishing interest and 65.3 per cent in creating desire. But in trading up, they rated only 27.3 per cent and in suggestive selling, they rated only 12.5 per cent.

If two recent surveys on consumer shopping habits are recalled, in one of which it was shown that 48 per cent of customers made an unplanned purchase and the other in which 54 per cent of customers made an unplanned purchase in their normal shopping, this very low percentage rating of 12.5 per cent in suggestive selling is pretty clear proof that retailers are badly falling down in what could easily be the best way for sustaining or increasing their sales volume.

The Unorthodox

Andrew Carnegie once told a group of college seniors that his greatest periods of growth in business were made during slack times. He meant that when other men were fearful and were retreating or had a "hold the fort" mentality, that then a few daring men could advance with greater ease.

Of course there were qualifications which Mr. Carnegie failed to mention. One of these is the capital to fight the tide. Another is a product commanding extra attention or a market clearly undeveloped.

But the record does show some surprising business gains in slack periods and even in the real depressions of the past. Even more surprising, these times seem to favor the vigorously imaginative small business.

There is another way in which business progresses during these times. That is, by being unorthodox.

It is amazing how orthodox business really is. In any one industry manufacturers all use about the same consumer advertising media. Any space salesman knows that the most difficult, most heartbreaking sales job is to solicit an account for a magazine that carries none of his competitor's copy. Advertising copy is monotonously similar. Retail practices fall into a few set formulas and all view the same things with anathema and hold other things constructive.

There is a hard instinct at work that makes a pattern few dare violate, even though the diversion is ethical, economically sound and unquestionably good business. Also trade practices freeze certain ways of doing business. For instance, there can be little doubt that the system of remuneration for advertising agencies has directed a higher percentage of the money spent to secure consumer recognition into magazines, newspapers, radio and billboards than might otherwise have been the case.

We know that there are many ways to secure consumer recognition other than through recognized, commissionable media. The ethical pharmaceutical companies provide a triumphant example. Revlon showed that this can be accomplished through the beauty parlor; Arden, Rubinstein and others have shown it can be accomplished by the demonstrator in a key retail store; Faberge has shown the potent force of consistent and extensive sampling; Avon Allied in every survey appears among the leaders—an excellent example of consumer recognition and prestige procured basically through direct consumer contact.

We have not explored too deeply the impulses and the means to stimulate word-of-mouth. Yet we do know that it carries serious conviction. It has been used negatively, in the past, by deliberately engineered whispering campaigns. It was used once, as a positive sales suggestion, in this industry, with great success.

In every industry there are a few examples of the unorthodox. They are usually small or medium size companies which appear very modest. There are

also, in every industry, some very large companies whose executives have now forgotten that they were once unorthodox.

There is no text-book on the unorthodox. But the principles are clear; (1) an intension to be unorthodox, (2) an inquiring, imaginative, level-h e a d e d mind.

Musical Advertising

It seems that music is coming into favor in this industry as an interpretative medium for many of the industry's products.

A few months ago we told how Benson Storfer, President of Corday, had arranged for a series of original, musical scores each interpreting one of the Corday perfumes, and had arranged with R.C.A. for a cooperative plan in the distribution of the several records.

Now we hear that Abbott Laboratories, which has for several years been a leading patron of the arts in this industry and which has sponsored many beautiful and permanently valuable paintings, has now turned to music.

In the Christmas issue of the house organ, "What Is New," published by Abbott Laboratories, there is an original musical composition by Johnny Green. The score, Materia Medica, is a three-part piano suite with Nicotine, Hypnotic and Stimulant, the titles of the three parts.

Over the past several years at least three companies in our industry, and two national advertisers not connected with our industry, have contributed substantially to the creation of American painting both by financing new paintings and by collecting and sponsoring national exhibitions.

We can think of a few happier solutions to the recurrent criticisms of advertising in this industry than to discover that patronage of the arts will pay its way in successful promotions. Certainly among the leading ethical companies of this industry, both the pharmaceutical and cosmetic, there must be many opportunities to secure wide spread public interest and to attach to the product a high degree of ethical prestige through further explorations along this path.

Can't Have It Both Ways

Prognosticators for 1949 are almost universally committed to a good year, but in the great majority of cases inject some word of caution. Nearly all admit the possibility of some minor recession and nearly all repudiate the possibility of anything approaching a real depression.

It is certainly true that if all the prophets for 1947 were right in the reasons that they gave for a declining perfume and cosmetic business, then these self-same reasons should provide an encouraging factor for the new year in cosmetic products.

Consumers who were supposed to abandon a great deal of luxury buying in favor of replenishing shortages for such things as household appliances have certainly pretty well taken care of these shortages as shown by slow sales, surpluses and cut prices in most electrical appliances, in radios, and in most other war-short goods. If it were true that the rising prices and the cost of living, particularly foods, took dollars away from cosmetics then a drop in the costof livingand the declining food prices should make more money available for cosmetics.

Professor McNair of Harvard told the National Retail Dry Goods Association that the economic health of the country is "good." But he added, "if now with the keen edge taken off their demand for durable goods, consumers are going to stand off and wait for lower prices those lower prices will probably be realized readily, but they may be realized as a result of severe economic dislocation, g e n e r a l unemployment, sharp declines in consumer income with great damage to our economic and political structure.

It has been noticed before, in this period of substantially rising wages for labor, that while labor wants more money for themselves, they are not at all ready to accept the fact that they must pay in the goods they purchase for an equal wage to labor in other industries. Even more than this, the really serious danger is that the large white-collar and middle-class, who have not participated equally in inflated earnings, may at some time decide that they either will not or cannot support the wage scale of labor in certain industries. This, in our opinion, is one of the most serious, dangerous factors in our economy.

Want To Make Cellophane?

Anybody who would like to manufacture cellophane can now do this without hinderance from patents or from du Pont, and in fact with the substantial help of this company.

We understand that representatives of the big chemical company have been making the rounds offering a free license plan, knowledge of skilled, personal, engineering data, and suggestions for appropriate plant sites, all at cost.

This is now a $65,000,000 annual market which is still growing and is expected to rise 10 to 20 per cent in the next few years.

The reason for this enlightened attitude is that just about the time du Pont Co. was set to go ahead with major plant expansions, the Department of Justice came along with the complaint that the company was monopolizing the c e l l o p h a n e industry "through patent and the fixing of arbitrary non-competitive prices." This complaint is another one of those utterly bewildering statements of the Department of Justice which tend to leave the small fellow and the consumer gasping for breath and wondering fearfully about his mental balance.

Almost anyone in the United States realizes that there could easily have been very little cellophane in this country if the world-wide alertness of du Pont in supporting new developments and their readiness to invest substantial capital funds of their stock holders' money to produce cellophane had not been available. They know also that there has been a steady decrease in the price of cellophane, so that step by step this product has become available in sufficient quantity, and has been priced so that the makers of low cost, utility products such as many food products and cigarettes could use it economically in their packaging.

The original price of cellophane commercially was $2.65 a pound in 1924. It declined to a low price of 33 cents and was forced up for the first rise last year to 45 cents.

We used to be told in school that theoretically the best form of government was a benevolent monarchy. It will be easy to conclude that from the consumer's view-point, the best form of production and sales could easily be a benevolent monopoly. Our Department of Justice, however, in their love of psychological effects have been completely indifferent to distinguishing between the kind of business growth that adds substantially to public benefits and the kind of business growth that misuses its economic position.

Anyway if you want to take advantage of this economic anachronism, the story is that you will only need a mere $20,000,000 for productive facili-

the Windsor line

MODERN .... "A Stock Line of Containers with the Incomparable Beauty of a Private Mould Design."

Available for immediate shipment in any quantity desired.

by Wheaton GLASS COMPANY, Millville, N. J.

New York Office 165 Broadway *Chicago Office 221 North La Salle Street*

ties that will enable you to operate on the cost basis required by the current market.

The Retail Balance

The share of the department store in retail sales has been dropping, according to Richard E. Snyder, a marketing economist. This drop has been from a 20 per cent of sales in 1935 to 17.6 per cent in 1947.

Department stores have been encountering some pretty heavy weather during the last few years in a number of ways. Two surveys last year in New England, and particularly a detailed survey in the city of Toledo, showed that a combination of factors, such as congested city traffic, indifferent selling, reduced selection of goods, and for many people inconvenient store hours, was causing a rather remarkable growth of city buying from mail-order houses at the expense of department stores.

Another factor weighing against department stores is a growing feeling among manufacturers that the department store is becoming more and more an uneconomical unit of distribution for many products. A certain section of the cosmetic business, that is the higher price, prestige products sold in selected distribution, is committed to the department store as a focal point for building prestige, and many deliberately used the department store for this purpose, with the expectation of making their profits from a broader field of the independent druggist. The price these manufacturers have to pay for such prestige includes the cost of a demonstration system, or liberal P.M.'s, a 100 per cent payment of cooperative advertising and store promotions for which they liberally foot the bill.

At the other end of the retail scale, that is from a fashion or prestige view-point, the expansion of the supermarket in number and dollar volume is startling. The number of these stores has increased from 6,175 in 1940 to the present number of 11,885. In this period sales have increased from two billion dollars to 8.4 billion dollars. At the present time, 35 per cent of the supermarket stores is carrying drugs and 31 per cent cosmetics.

Pity the Poor Farmer

Drugs as well as foods may see within the next few years the beginning of a vast change that will completely alter everything we know now or do about these two basic kinds of products.

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing sales for the month of November 1948 as compared with the same period in 1947.

	Department Stores	*Drug Stores*		*Department Stores*	*Drug Stores*
Atlanta	0	–1	Minneapolis	+6	+15
Baltimore	+3	0	Milwaukee	0	+3
Birmingham	+1	–7	Newark	–6	–13
Boston	0	+2	New York	–5	+4
Chicago	+4	+2	Philadelphia	+2	+2
Cincinnati	+2	+3	Pittsburgh	+14	+2
Cleveland	+3	0	Providence	–8	–2
Dallas	–1	0	St. Louis	–3	+7
Detroit	+2	+5	San Francisco	–1	–7
Los Angeles	–7	–6	Seattle	–1	0

Reports derived from the Atomic Energy Commission suggest that The University of California is hot on the trail of finding ways to control or to d u p l i c a t e the products of photosynthesis.

A radio active by-product of atomic energy, called Carbon 14, provides the tool by which this primary mystery in nature may be traced. Already investigations have proceeded to a point where the simplest forms of plant life, such as the seaweed, can be made to produce great quantities of fat, or proteins, or carbohydrates.

There could hardly be a dream more fantastic than that the factory would replace the green-leaf plant world and by-pass the plant in the manufacture of all kinds of food and in the multitude of medicinal and other chemical compounds produced by plants. And yet it seems that work has already progressed to a point where leading scientists will admit that this is not only possible but probable within a short span of years.

Homerized Paper

From sanforized shirts and homogenized milk to "homerized" tissue paper. That's the latest development in purifying water processes used in the manufacture of tissue papers of all descriptions.

A radical improvement in the manufacture of all types of tissue papers is being claimed by the National Paper Corporation in its production of facial, towels and toilet tissues.

The formula—a closely guarded secret—is the discovery of Homer Ray, chief chemist and technical director of the National Paper Corporation at Ransom, Pa. But he does lift the veil enough to admit that through complete water purification tissue papers will be free of bacteria and other unwanted substances. And all the tissue products w i l l be softer w i t h o u t sacrifice of strength or color.

The importance of the process may be realized from the amount of water used by the National Paper plant at Ransom daily. For example, 1,500,000 gallons of Susquehanna River water-laden with culm and other debris are pumped into the Ransom plant every 24 hours. After being purified and used in the paper manufacturing process, this water returns to the stream minus foreign matter which is removed by chemicals.

Water is the carrying medium for the fiber which goes into the paper and after it has gone through the usual cleansing steps into the "clear well" here is where Mr. Ray's process comes into play to make the water absolutely pure. It is then distributed to the paper making machines after "homeriziation" as Mr. Ray puts it, "Pure water means bacteria-free paper."

"Homerized Paper"—the official name for the new development—will go into toilet tissues, napkins, towels and facial tissues, marketed by the corporation.

Hospital Market

Cosmetic manufacturers do get some gift business for hospital patients. Every once in awhile somebody bobs up with a plan of specialized attention to this market.

Figures of patients in hospitals during 1947 show a national total of 15,829,514 patients, of which 11,625,170 are non-governmental hospital patients.

This means certainly a gift business for flowers alone in the neighborhood of $50,000,000; in other words, in excess of the total amount of money spent for fragrances.

NEW PRODUCTS AND NEW PACKAGES

LAURIUM, a new oral hematinic combining ferrous gluconate with other important blood-building factors for the therapy of anemias, is now made available by Whittier Laboratories. It is available in 100 capsule bottles.

PLASTIC SPECIALTIES CO. has an inexpensive grooming aid for giving a professional looking hair-do at home. It is an atomizer to spray a thin film of laquer on the hair to hold it in place. Retails at $1.35.

URIDINE, a compound having the pyrimidine uracil linked to the pentose D-ribose, is now offered for biochemical research purposes by Schwartz Laboratories, Inc.

KATHLEEN MARY QUINLAN is offering an attractive two-piece combination box of hormone cream and foundation lotion, packaged to retail at the special price of $2.00.

THE UPJOHN COMPANY has developed a powder inhaler for use in penicillin inhalation therapy. The inhaler consists of three parts, a barrel and capsule-well, and a rubber bulb. It is for use with Upjohn's inhalation penicillin, two colored capsules, each containing 100,000 units of crystalline penicillin G.

COLOR COLLECTION by Peggy Sage is a special lipstick and miniature polish combination. The package consists of three bottles of manicure polish and three matching lipsticks. These sets should appeal to the consumer because it gives her a supply of matched make-up shades to accent the wardrobe. Retails at $3.00 plus tax.

WINTHROP-STEARNS Inc. has increased the potency of its multivitamin product, Polytaxin capsules to the strength of Hexavitamin capsules, U.S.P. XIII. Price for the product (fair-traded) is $2.82 for bottles of 100.

TUSSY in its annual sale of Emulsified cleansing cream and Pink cleansing cream has a smart bargain for the smart woman. The $3.00 creams are selling for $1.95 each and the $1.75 sizes for $1.00.

E. R. SQUIBB & SONS has released the Penicillin Dispolator, a devise for penicillin powder inhalation therapy. The Dispolator is used to combat respiratory infections caused by penicillin-sensitive organisms amenable to aerosol therapy. It is designed to direct the dose toward the lower respiratory tree, and also to disperse penicillin powder over the turbinates, the nasal mucosa, and throughout the upper respiratory tract.

LAKESIDE LABORATORIES, INC., introduces Estrotate with Progesterone, indicated for use in cases of habitual or threatened abortion, hypogonadism and amenorrhea. The active constituents of this combination are pure crystalline ester of the natural follicular hormone, and alpha-estradiol 3-trimethylacetate.

MERCK & CO., INC., is marketing a new and potent parasympathomimetic drug, Urecholine Chloride. It is used for the prevention or alleviation of distressing postoperative gas pains and abdominal distention due to the loss of smooth muscle tone. The product is available in bottles of 100-5mg. tablets for oral use, and in cartons of 6-1cc ampuls, containing a solution suitable for subcutaneous injection.

SHARP & DOHME, INC., announces the release of Cremotres-A, a palatable triple sulfonamide suspension, containing an alkalizing agent to reduce the incidence of renal complications. Each 100 cc. of the product contains 2 Gm. sulfamerazine, 4 Gm. sulfadiazine, 4 Gm. sulfamethazine, 33.3 Gm. sodium lactate and suitable flavoring agents.

REHEIS COMPANY, INC., manufacturers of fine chemicals for the drug and cosmetic industries, is now offering to the trade its special dermatological astringent "Chlorhydrol" (Aluminum Chlorhydroxide Complex) in solution form.

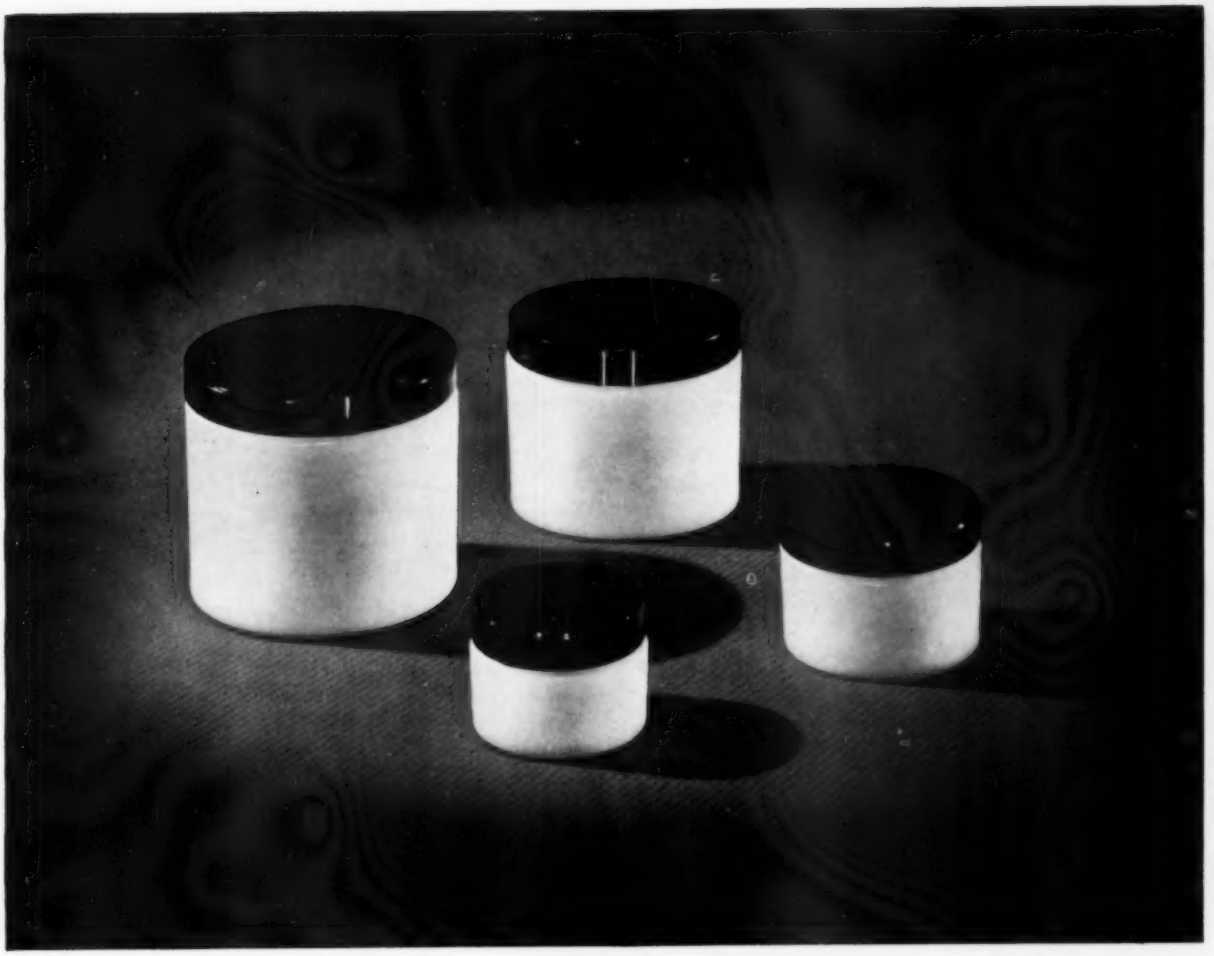
MIDDLEBROOKE LANCASTER, INC., manufacturers of Nutrine beauty preparations, announces a new retailer, "Keep-Neat" Hair Dress, containing lanolin. A high-brilliance hair groom as well as an aid to hair conditioning, this new product leaves no greasy aftereffects.

WHITTIER LABORATORIES, Division Nutrition Research Laboratories, introduces Arthralgen, an Arthralgesic Unguent as an adjunct to the systemic therapy of chronic arthritis with Ertron Steroid Complex.

FREDERICK TROUT COMPANY, INC., is offering Calsamate, which presents aspirin in combination with calcium glutamate and ascorbic acid. The combination is more rapidly absorbed than aspirin alone, and greatly reduces unpleasant side effects, through the buffering action of calcium glutamate. The ascorbic acid content meets the need for this vitamin in conditions for which salicylate medication is prescribed.

CARRY-ALL LTD. is responsible for a new and handy compact-lipstick duo, attached to each other by a hinge which permits the lipstick to lie under the compact in a sandwich effect. Called "Prettyface," this combination may be purchased with the lipstick container filled or unfilled.

A. H. ROBINS COMPANY, INC., announces its new product, Pabalate, an antirheumatic combining para-aminobenzoic acid and sodium salicylate in an enteric coated tablet.



CARR-LOWREY GLASS CO.

The clean, refreshing look of Carr-Lowrey Opal Jars recommends them as containers for the finest of cosmetic products. They have the brilliant whiteness and opacity that attracts attention and invites purchase of the product. Available in a complete range of sizes from ½ oz. to 16 ozs.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 40 W. FORTIETH ST. • *Chicago Office:* 1502 MERCHANDISE MART

ECONOMICAL SEAL WITH SALES APPEAL..
the Anchor* NKCT Cap

FIRST and of greatest importance in packaging your products, the seal must be dependable—airtight and leakproof. You get that dependable sealing with the *Anchor* NKCT Cap.

Along with dependability you get economical sealing because of its modest initial cost and because its scientifically designed deep rolled thread permits ample clearance over the glass thread and prevents binding—speeds up application and keeps production costs down whether the cap is applied by hand, hand chuck or sealing equipment.

And the *Anchor* NKCT Cap gives your package added sales appeal. Its knurl-free skirt and smooth trim lines enhance package appearance. Housewives like the *Anchor* NKCT Cap because it looks smart, is so easy to remove and replace and because it protects contents until entirely used.

*Reg. U. S. Pat. Off.

ANCHOR HOCKING
GLASS CORPORATION
Lancaster, Ohio

ON CONVEYORS

It's shock-resistant Anchorglass*

CONVEYORS move glass containers from station to station, 'round 90° turns, at seemingly incredible speeds. There's bound to be ganging-up of containers and resultant friction, knocks and shocks on these modern high-speed conveying lines.

Anchorglass containers are designed and manufactured to withstand such handling; to give a consistently high level of performance on your packaging lines. They're tough and strong—the result of uniform distribution of glass, consistency in manufacture, accurate temperature control in annealing, an exacting quality control program and a constant emphasis on higher manufacturing standards.

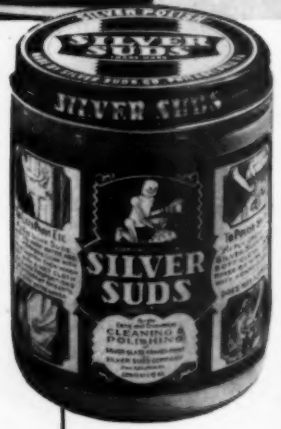
Write us for samples for test purposes. *Anchorglass* containers are available in crystal, amber and emerald green glass, in all popular styles, capacities and finishes.

*Reg. U. S. Pat. Off.

ANCHOR HOCKING
GLASS CORPORATION
Lancaster, Ohio

It's a family tradition
Lots of smart young housewives keep their treasured family silver shining the same way their mothers and grandmothers did . . . with dependable Silver Suds Polish.* For over 50 years it has helped them keep their fine pieces clean and bright.

The use of Crown Closures is likewise becoming a tradition with countless drug and food packers. They have found that the patented Deep Hook Thread construction of Crown Screw Caps gives them dependable sealing and trouble-free application on the assembly line. It grips under the glass thread of the container and exerts a positive down-pull action. Crown liner materials complete the protection of glass packaged products. They are cut to full thickness and developed especially to meet the sealing requirements of specific products. Crown Cork and Seal Co., Baltimore 3, Md. *World's Largest Makers of Metal Closures.*



CROWN CLOSURES

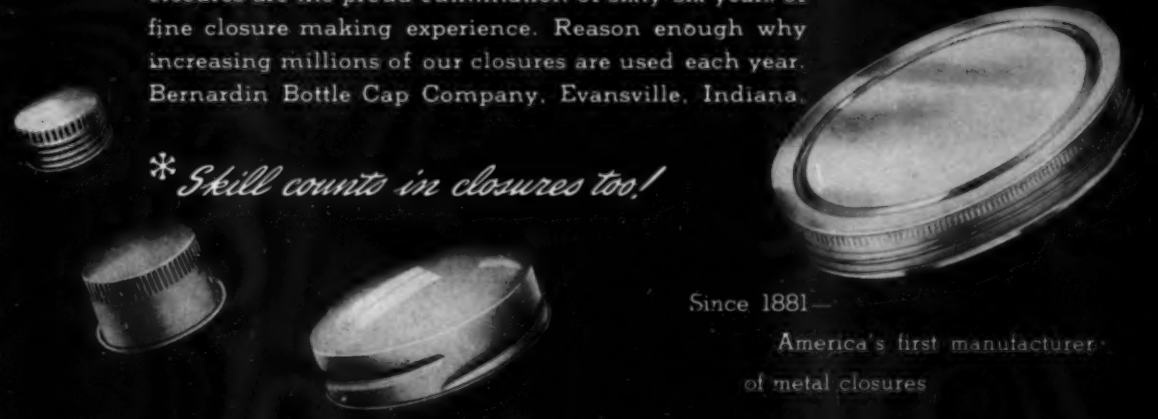
Approved by millions of housewives

A product of Silver Suds Co., Philadelphia, Pa.

SKILL COUNTS*

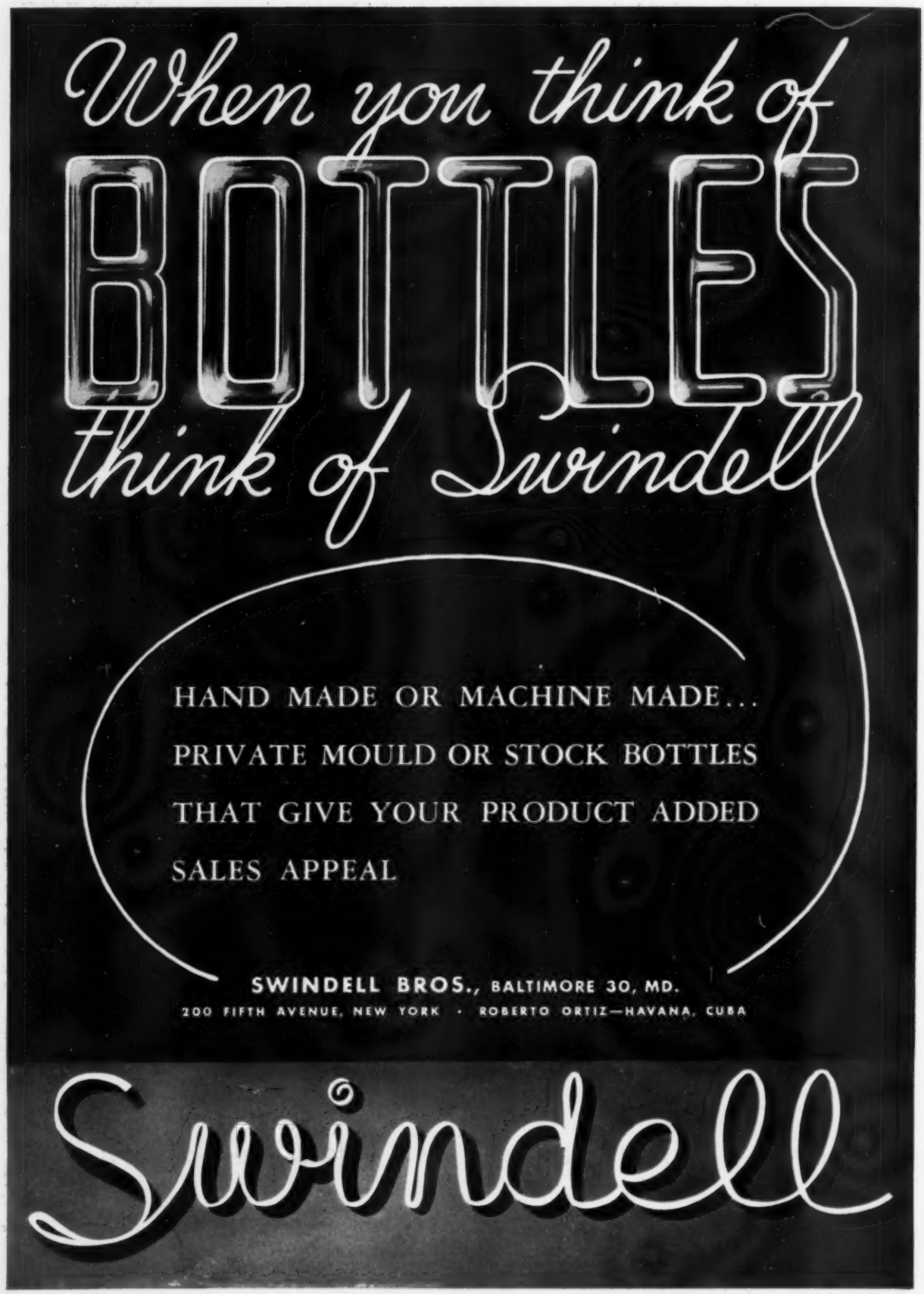
BERNARDIN
Metal Closures

Just as skilled surgeons prolong human life, so skilled closure specialists at Bernardin protect precious products; safeguard prized reputations. Today's Bernardin closures are the proud culmination of sixty-six years of fine closure making experience. Reason enough why increasing millions of our closures are used each year. Bernardin Bottle Cap Company, Evansville, Indiana.



** Skill counts in closures too!*

Since 1881—
America's first manufacturer
of metal closures


When you think of
BOTTLES
think of Swindell
HAND MADE OR MACHINE MADE...
PRIVATE MOULD OR STOCK BOTTLES
THAT GIVE YOUR PRODUCT ADDED
SALES APPEAL
SWINDELL BROS., BALTIMORE 30, MD.
200 FIFTH AVENUE, NEW YORK · ROBERTO ORTIZ—HAVANA, CUBA
Swindell

METAL CONTAINERS
and
CLOSURES
by
BRIDGEPORT

Vanities — Powder Boxes

Jar Caps — Perfume Vial Cases and Caps

Bottle Caps — Lip Brushes

Drawn Talc Containers — Dry and Paste Rouge Cases

Lipstick Containers --- Swivel, Slide, Automatic

and

Other Special Metal Products
for the Cosmetic Industry

THE BRIDGEPORT METAL GOODS MFG. CO.
Established in 1909

BRIDGEPORT **CONNECTICUT**

Broder does it again

COMPLETELY REVOLUTIONARY

PRECISION PROPULSION

4 PIN CUP SWIVEL LIPSTICK CONTAINER*

Wholly different from anything ever made

Fool-proof mechanism as accurate and velvet-smooth as a precision watch movement

ALWAYS

- Eliminates cup wobble.
- Prevents shearing and taking off sheen of filler.
- Completely locked in four places at all times.
- Cup rides on 4 pins on a double track.
- No jamming — Pins cannot slip out of track
- Eliminates returns due to faulty or defective mechanism.

Plus BRODER patented Free Wheeling . . . the cup which rides up or down ONLY when the cap is off. Gives you a NON-SMUDGE CAP.

In Rich Low DeLuxe All-Polished Brass protected by a Startling New NON TARNISH Lacqeur

LOOKS BETTER . . . WORKS BETTER . . . COSTS LESS

PHONE . . . WIRE . . . WRITE

BRODER INDUSTRIES

INCORPORATED

*Pat. Pdg.

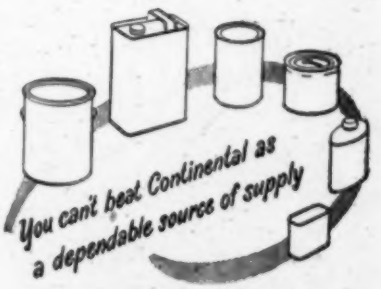
55 FERRIS STREET, BROOKLYN 31, N. Y. · MAin 4-3772

NEW YORK SALES OFFICE • 565 FIFTH AVENUE • MUrray Hill 8 4270

IT PAYS TO

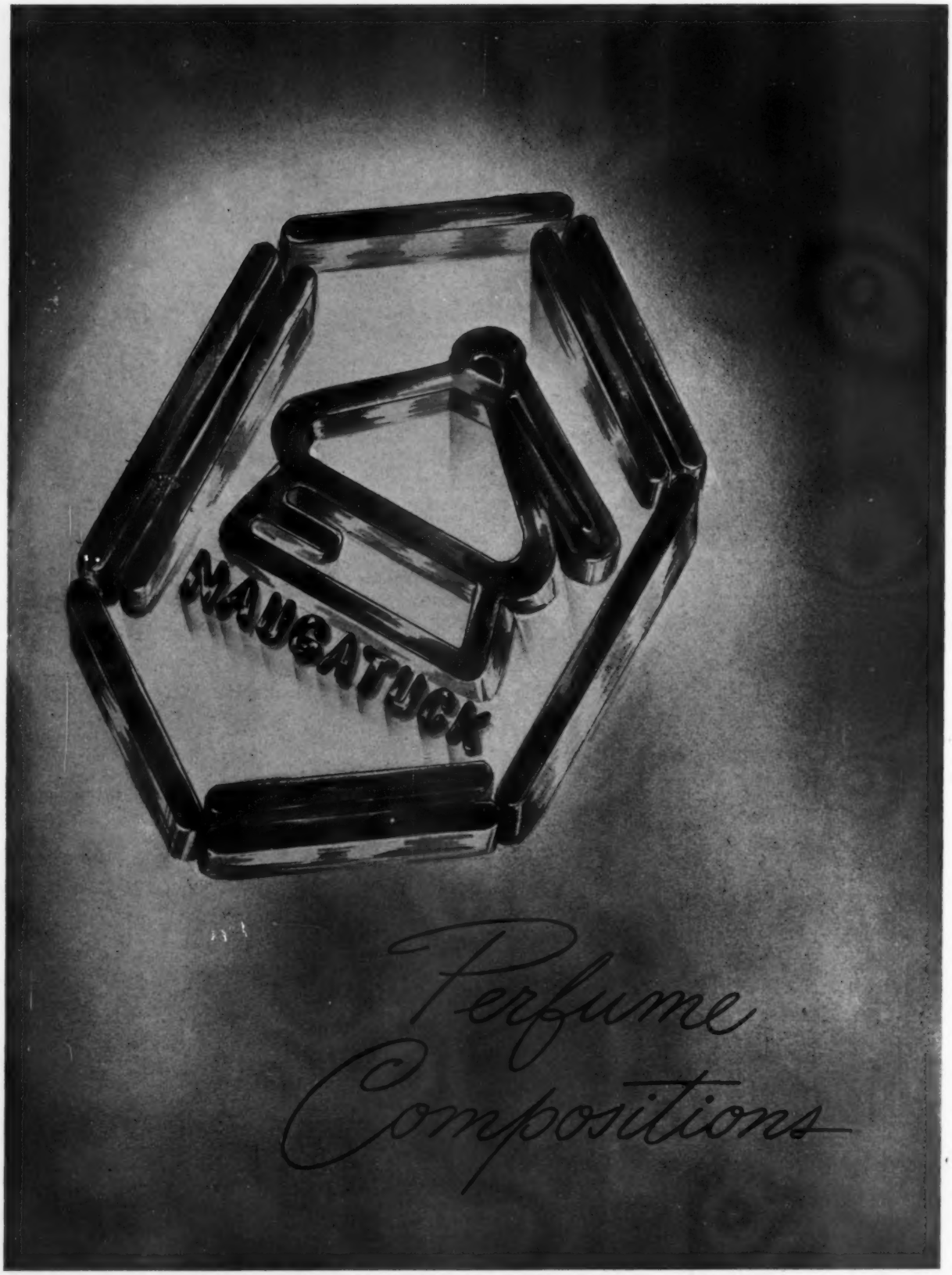
Check with CONTINENTAL

- Next to the products you pack, there's nothing more important than the cans you pack them in.
- That's why we think it's such sound business for you to check with Continental before making any decision affecting your supply of cans.
- It costs nothing to talk things over and . . .
- We may be in a position, because of our size and flexibility, to assure you a dependable supply.
- We may be able to give you faster service.
- We may be able to save you money by suggesting a change in your packing operation.
- Or we may be able to help you with a knotty technical problem.
- Why not "Check with Continental" today?



CONTINENTAL CAN COMPANY

100 EAST 42nd STREET, NEW YORK 17, N. Y.



NAUGATUCK AROMATICS

NEW YORK ★ CHICAGO

NEWS . . .

Heads F.W. Fitch Co.

Lucius W. Fitch has been elected president of the F. W. Fitch Company, Des Moines. He succeeds his father, Fred W. Fitch, founder of the company, who has been named chairman of the board.

LUCIUS W. FITCH

Lucius Fitch started with the firm in 1929 after graduation from college. Starting as a salesman, he worked his way up through the various departments until he was elected vice president in 1945. During the last war he served as a major in the Army.

Other Fitch officers reelected are: Gail W. Fitch, vice president in charge of advertising; L. R. Sabdahl, vice president in charge of sales, and R. H. Young, secretary and treasurer.

Kroeger Rejoins Monsanto

Arthur P. Kroeger, assistant general manager of sales for the Organic Chemicals division of Monsanto Chemical Company, has returned to active duty, the company has made known.

Mr. Kroeger has been absent for nearly a year because of poor health. Several changes in organization have been announced at the same time by Richard Ord, general manager of sales for the division.

Charles H. Sommer, Jr., acting assistant during Mr. Kroeger's illness, has been appointed assistant general manager of sales. Other changes were the promotions of Seth U. Shorey to manager of plasticizers and resins sales and of B. B. Langton to manager of intermediates sales. Both men headed their respective departments during the interim.

To aid Mr. Shorey, A. D. Evans has been transferred from the company's Detroit sales office. J. G. Hicks, formerly in St. Louis, has replaced Evans.

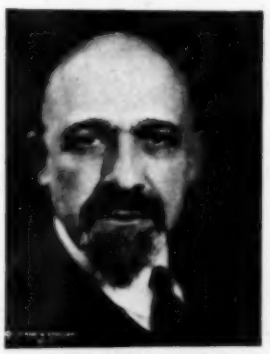
Meyers Heads Penick Essential Oil Dept.

Charles A. Meyers has joined S. B. Penick & Co., New York, as vice-president in charge of the Essential Oil Department. Mr. Meyers retired from Dodge & Olcott, Inc., in June 1948, after forty years with that company. He was president of the company at the time of his retirement.

Joseph M. Jaffin has been appointed assistant manager of the Essential Oil Department. For more than twenty years, Mr. Jaffin has been associated with production and management in the cosmetic field. For many years he was associated with Universal Laboratories.

Dr. Isermann, Van Dyk President, Dies

Dr. Samuel Isermann, president of Van Dyk & Company, Inc., died February 1, in San Antonio, en route to his winter home in Tucson, Ariz. He leaves a wife and daughter.



DR. ISERMANN

He was an ardent proponent of the self-sufficiency of the United States from a chemical viewpoint. Together with the late Francis P. Garvan, founder of the Chemical Foundation, he headed the infant American chemical industry to retain the hold it had gained during the First World War, and to eventually consolidate this into the present world-wide supremacy of the industry.

Named to Squibb Post

The appointment of C. William Lemkau as manager of consumer products sales promotion has been announced by J. J. Toohy, vice president and general sales manager of E. R. Squibb & Sons.

Mr. Lemkau has been assistant merchandising manager for Squibb. His new duties will take him into the field, where he will work directly with Squibb representatives.

Shafer in New Post

E. G. E. Shafer has been appointed director of product control of Hoffmann-

E. G. E. SHAFER

La Roche Inc. Mr. Shafer, who joined the company thirteen years ago, will now be in charge of control of all products for sale by the firm. He is graduate of the University of Pennsylvania and, prior to joining Roche was associated with E. I. Du Pont de Nemours & Company and Wyeth Inc.

Heads Chicago Perf. Soap & Extract Assn.

James T. Leavitt, vice president of the Central Solvents & Chemical Company, is the new president of the Chicago Perfumery, Soap & Extract Association. Mr. Leavitt is a graduate of St. Thomas & Rockhurst Colleges, and has been active in the affairs of the chemical industry of the Middle West for the past fifteen years.

Other newly elected officers are: W. F. Krammerer, Geo. Lueders & Company, vice president; Chas. E. Arch, New England Collapsible Tube Company, secretary; J. C. Browning, Hydrosol, Inc., treasurer.

Winthrop-Stearns' D. C. Rep.

Daniel E. Smith has been named technical sales representative in the Washington, D. C. area for the combined special markets and industrial division, Winthrop-Stearns Inc.

S & D Name Raitt

The appointment of W. P. Raitt, Kansas City district sales manager, Sharp & Dohme Inc., to the post of sales training supervisor has been made

WILLIAM P. RAITT

known by the company.

In his new position, Mr. Raitt will serve with Frank Walton, sales training manager, in the operation of S & D program of sales training for all field representatives in this country and Canada.

H. W. Kinney & Sons, Changes Name

H. S. Kinney, president of H. W. Kinney & Sons, Inc., has announced the firm has changed its name to Kinney & Company.

Activities will continue to be centered on the promotion of prescription specialties to the medical and allied professions.

Cin. Drug Assn.

The first 1949 meeting of the Cincinnati Drug & Chemical Association, Inc., was held January 24 at the Hotel Alms. H. B. Fuller of the H. B. Fuller Company was the guest speaker of the evening.

Perfumers Society Elections

At the annual meeting of the American Society of Perfumers, January 19, the following officers were elected for 1949; President, Dr. A. T. Frascati, Firmenich & Company; vice president, George J. Tombak, E. I. Du Pont de Nemours & Company Inc.; Secretary, William H. Barlow, Orbis Products Corporation; treasurer, R. B. Houk, Dodge & Olcott, Inc.

Elected to the board of directors for three year terms were Basil A. Pegushin, Schimmel & Company, Inc., and Waldo Reis, of Van Ameringen-Haebler, Inc.

The retiring president, William H. Dunney Sr., of Ungerer & Company, Inc., was elected as chairman of the board of directors.

Named Relations V.P. for Schieffelin

Ronald Helps has been named vice president in charge of professional and public relations of Schieffelin & Company. He joined the drug firm in 1922 and has been in charge of production and sales of the laboratory division.

Also appointed to new spots were: Y. C. Campell, production director; E. W. Blanchard, research director; Stanley Bendetson, advertising manager; Thomas Hughes, personnel and production manager; Arthur D. Gazzo, assistant controller; W. J. Manning, Jr., special products sales supervisor; A. V. Roche, Jr., professional service supervisor, and Anthony E. Fuchs, office manager.

Officers of Vanilla Bean Assn.

The following officers were elected for the year 1949 at the annual meeting of the Association held January 21: President, E. S. Buckley, Thurston & Braidich; vice president, W. Triest, Zink & Triest; treasurer, J. Manheimer; Directors, Pierre Daumann, H. Solomon, and Wm. Schilling, Jr.

Sonneborn on Bank Board

Rudolph G. Sonneborn, of L. Sonneborn Sons Inc., has been elected a director of the Modern Industrial Bank.

Abbott Appointments

Ray O. Vandapool has been named branch manager for Abbott Laboratories at Denver, Col. He succeeds Paul G. McGlothing, who has been made branch manager at St. Louis.

The appointment was also announced of Irwin Cross as manager of the Abbott district with headquarters at Jacksonville, Fla. Mr. Gross was previously Abbott sales representative at Greenwood, Miss.

Vic Williams in Hospital Drive

Victor E. Williams, director of sales of the organic chemicals division of the Monsanto Chemical Company, has accepted the chairmanship of the Drug

VICTOR WILLIAMS

and Chemical division of the Beekman-Downtown Hospital 1949 maintenance fund, H. C. Conick, chairman of the drive has announced.

Upjohn Advances Eberly

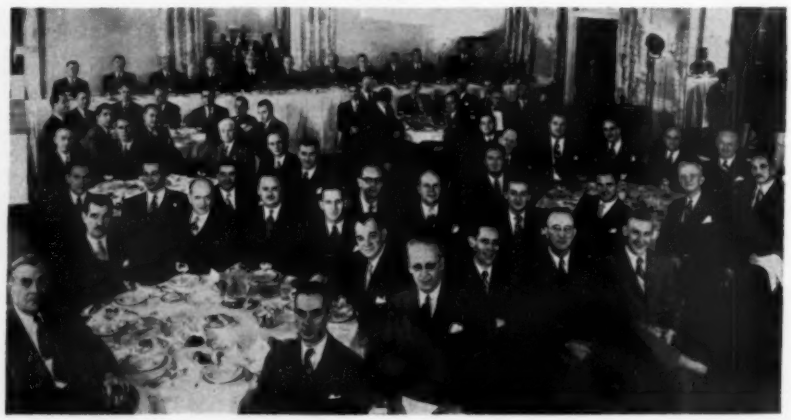
The Upjohn Company, Kalamazoo, Mich., has announced the appointment of Dr. Floyd A. Eberly as assistant director of production. A graduate of the University of Kansas, Dr. Eberly has been employed by Upjohn since 1935.

New Polak Catalog

A new, easy-to-use 44 page catalog of essential oils, flavoring materials, aromatics and perfume oils prepared by Polak's Frutal Works, Inc., 36-14 35 St., Long Island City, N. Y.

For buyers interested in prices, Polak's Frutal Works has prepared a special price list. Both catalog and price list are available on request.

If you will take out your magnifying glass you can pick out Percy C. Magnus (fifth from left at speakers table) president of Magnus, Mabee & Reynard, Inc., where he presided over the banquet during the three day sales convention held at the Hotel Warwick, New York, January 7-9.



Loeffler Head Salesmen's Assn.

The new president of the Salesmen's Association of the American Chemical Industry, Inc., is Alfred T. Loeffler, Monsanto Chemical Company. Other

A. T. LOEFFLER

officers are: vice president, Charles V. Douglas, Heyden Chemical Corporation; treasurer, Paul W. Hiller, Innis, Speiden & Company; secretary, Edward A. Bush, Bush Aromatics, Inc.

Board of directors includes: Harold C. Green, L. Sonneborn Sons; Robert L. Hutchins, Commercial Solvents Sales; Leon W. Miller, The Garrett Division; Robert J. Milano, Millmaster Chemical Company; George W. Poland, Jr., Stauffer Chemical Company; William J. Weed, Niagara Alkali Company; Ex-officio member is retiring president James G. Park, Enjay Company, Inc.

Mauval To Handle Aziza

Richard Sussman, president of Beau-Val Inc., has announced the appointment of Mauvel Ltd., as exclusive distributors for Aziza eye cosmetics.

Promotion, advertising and merchandising, will remain under the supervision of Andre Sussman, with Beau-Val continuing to manufacture Aziza.

Plough Corp. in New Site

Purchase by Plough Inc., Memphis, Tenn., of a plant that will consolidate under one roof all operations now carried out in eight Memphis plants, has been announced by the president and founder of the company, Abe Plough.

Located on more than thirteen acres of land, the plant will cover approximately five acres, provide 200,000 square feet of floor space and ample room for future expansion.

Converging operations in one plant will bring 800 to 900 employees together and provide them with modern working facilities. Although Plough has plants in several foreign countries, products will be produced in the Memphis plant for export to sixty countries.

Joins Fritzsche Perfume Div.

Faced with increasing demands upon the time and services of its fine and technical perfume divisions, Fritzsche Brothers, Inc., announced the addition of Fred W. Fielding to its staff February First. With some twenty years of close affiliation with the perfume, cosmetic and aromatic chemical industries as a background, Mr. Fielding brings a wide experience to the company in its period of expansion.

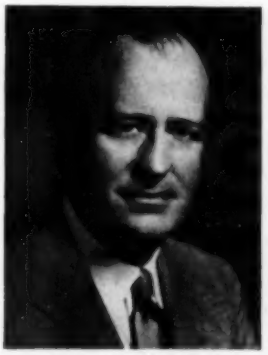
Miller Retires from Bodeker Drug

Edward M. Miller, treasurer of the Bodeker Drug Company, and head of the sundries department, has retired after more than forty years with the firm. Although retiring from active service, he will continue to be associated with the company as chairman of the board. His responsibilities as treasurer have been delegated to the president and H. L. Smith succeeds him in the sundries department.

H. Kenneth Jackson, has been appointed operations manager and as such will superintend the buying in the sundries department. The buying of drugs and pharmaceuticals will be done by Henry L. Waldbauer. Edward L. Krug has been made superintendent of the warehouse. Henry F. Miller, Jr., and Charles H. Miller are now vice president and secretary respectively. Henry Miller, Jr., also serves in the capacity of general sales manager.

Lee Bristol Heads Bristol-Myers

Lee H. Bristol, executive vice president of Bristol-Myers Company, New



LEE H. BRISTOL

York, was elected president of that company at a recent meeting of the board of directors. He succeeds his brother, Henry P. Bristol, who becomes the chairman of the board. Dr. Delmas K. Kitchen, director of the medical division for the company, was made a vice president, and Franklin H. Bivins and Gustave A. Jaeger became assistant vice presidents.

HENRY P. BRISTOL

Canco Names Hopkins VP

Harvey C. Hopkins, general manager of purchases since 1944 for American Can Company, has been named vice president in charge of purchasing and traffic. He assumes the duties of Albert R. Pfeltz, who died January 4.

Wrisley Appointment

R. E. Tyriver has been appointed field sales manager of Allen B. Wrisley Company. His work includes promotion of all Wrisley brands, soaps and toiletries. He formerly was with Colgate-Palmolive-Peet Company.

Northam Warren Jr. on South American Trip.

Northam Warren Jr., vice president and general manager of the Northam Warren Corporation sailed for South America February Fourth. He is accompanied by his wife.

Their first stop will be Chile, where they will be joined by Oscar Pando, vice president of the Warren Corporation, South American operations. The trip will take two months to complete, and will take in Chile, Argentina, Brazil and Uruguay.

Joins Fleuroma Sales

Fleuroma, Inc., has announced the appointment of William F. Meeks as salesman in the New York Metropolitan district, and the states of New Jersey, New York and Pennsylvania.

Following four years in the Army in the Southwest Pacific area, Mr. Meeks was with Magnus, Mabee & Reynard and the essential oil department of S. B. Penick & Company before joining Fleuroma.

WELL, IT'S ONE WAY TO LOOK FOR PROFITS

Yes, so it is . . . and a cut above wishful thinking at that! When mounting costs and mounting competition combine to put you in a quandary, however, you're likely to have better luck if you look for the elusive profit margin in your packages.

Look for it in terms of cutting quality to cut costs, and you might as well go back to the crystal ball. Look for it in terms of improving quality to increase production efficiency and sales, and the odds are in favor of your finding it.

We have no Madame La Zonga on our payroll, but we do have some packaging engineers whose experience and records really qualify them for that abused term of "experts." Their counsel is yours for the asking, with no strings attached, should you decide that a careful look at your packaging problems may well reveal potential profits you're missing.

When the very best is none too good, that's a job for Ridgelo *brush finish* . . . the ultimate in boxboard quality, luster, and printability. Custom made in both white and colors.

The difference between a 10-strike and the gutter, in bowling alleys or package board, is often spelled by obscure imperfections. Ridgelo is as perfect as any paper can be.

Whatever the color requirements, Ridgelo can meet them . . . with *integrated* pigments. That means uniform colors, light-resistant colors, bright eye-catching colors.

Ridgelo has a rare combination . . . the folding qualities necessary for fast forming and firm glueing, plus the snap and strength that spells real serviceability.

Ridgelo
CLAY COATED
BOXBOARDS

MADE AT RIDGEFIELD, N. J. • BY LOWE PAPER COMPANY

Representatives:
H. B. Royce, Detroit
Norman A. Buist, Los Angeles
A. E. Kellogg, St. Louis
Philip Rudolph & Sons, Inc., Philadelphia

E. F. Schwab Named to S & D Sales Post

E. F. Schwab, St. Louis district sales manager, Sharp & Dohme, Inc., has been named sales manager of the newly consolidated Kansas City-St. Louis district.

Following 9 years of retail drug experience in Texas, Mr. Schwab became associated with Sharp & Dohme in 1931 as a creative representative.

Flood in New Tek Hughes Post

H. J. Henry, president of Tek Hughes, Inc., has announced the appointment of James J. Flood as executive vice president of that company. Mr. Flood, formerly vice president in charge of sales for Tek Hughes, assumed his new position as of the first of the year.

Wheeler Succeeds Kiefer

George L. Wheeler has been appointed to succeed the late Mr. Kiefer to represent George Lueders & Company. He has been connected with both Wyeth Inc., and Sharp & Dohme during the last fifteen years.

Harvey Research Program

Merritt C. Cole, general manager of G. F. Harvey Company, Saratoga Springs, New York announces completion of plans for an extensive program of research and development. New Laboratories have been equipped and personnel added to the scientific staff. A new line of veterinary specialties has been developed and will soon be announced. The entire program is under the direction of George N. Malpass, director of laboratories.

Dr. Schreiber Joins Upjohn

President and general manager, Donald S. Gilmore has announced the appointment of Dr. Richard S. Schreiber as associate director of research at the Upjohn Company.

R. S. SCHREIBER

Dr. Schreiber is a graduate of Wabash College and the University of Illinois, where he received his Ph.D. in 1935. Since then he has been employed as an organic chemist by E. I. DuPont de Nemours & Company, serving last as a research supervisor in the experimental station for that company.

Three Squibb Appointments

Peter M. Oliver has been appointed district manager of the Atlanta sales division of E. R. Squibb & Sons, according to an announcement by William L. Arscott, field sales manager. At the same time it was announced Joseph R. Watkins has been named district manager for the Washington D.C. district of the Philadelphia sales division.

George S. Squibb has been appointed manager of the department of sales division office administration of E. R. Squibb & Sons. In this new position Mr. Squibb will supervise the office procedures in all 13 of the company's sales branches throughout the country.

A graduate of Harvard University, Mr. Squibb has been associated with the company since 1937. He is the great grandson of Dr. Edward Robinson Squibb, who founded the company in 1858.

Hall Joins Oxzyn

James H. Hall, formerly with Whittaker, Clark & Daniels, has become associated with the Oxzyn Company in charge of technical sales, product improvement, and plant operations.

Beauty Fashion Awards

Beauty Fashion has announced that Beauty Fashion AWARDS for 1948 have been presented to: Charles of the Ritz for Merchandising Policy; Dorothy Gray and Hudnut Sales Company for Promotion; Elizabeth Arden and Revlon Corp. for Advertising; and to Charles of the Ritz for packaging of Directoire.

The jury of Award consisted of Alice Farley, Lord & Taylor; Frank M. Head, Whelan Drug Stores; John S. Holliday, Joseph Horne Company, Pittsburgh; T. J. Maruca, The May Company Denver; Alice Mathews, Mandel Brothers, Chicago; T. M. MacDonald, The H. S. Pogue Company, Cincinnati; J. J. Otto, The May Company, Los Angeles; Thelma Redick, Frederick & Nelson, Seattle; I. C. Sieving, Miller Brothers, Chattanooga, and Allette Wennerstrom, Halle Bros., Cleveland.

Shell Moves Offices

Shell Chemical Corporation has announced the transfer of its administrative offices from 4 W. 58 St., to 50 W. 50 St., New York 20.

The Eastern division sales offices continue to be located at 500 Fifth Ave., New York 18, and the Western division sales offices at 100 Bush St., San Francisco 6. The offices of the export division will be at 4 W. 58 St., New York 19.

Hodgkin Named V.P. of Ayerst

Robert E. Hodgkin has been appointed vice president in charge of sales for the U. S. and Canada of Ayerst, McKenna & Harrison, Ltd., division of American Home Products Corporation. At the same time it was made known that Charles M. Johnson was appointed sales manager for U. S. operations of the firm. Both Mr. Hodgkin and Mr. Johnson have been with the company for thirteen years.

Henry F. Woulfe, president of the Pepsodent division of Lever Brothers (left), Dr. Morris Fishbein editor of the AMA Journal (center) and Sherman Billingsley, perfume salesman and owner of the Stork Club, where the party to introduce the debut of Pepsodent's new Rayve Home Permanent kit was held.

BENJ. FRENCH, INC.

ESSENTIAL OILS -- AROMATIC CHEMICALS

DESCOLLONGES
PRODUCTS

JASMAROME

A new synthetic Jasmin which reproduces to a remarkable degree the true odor of Natural Jasmin Oils extracted from pomade washings. This new product gives splendid results, used with the natural or to replace it entirely. Write for sample or trial quantity.

160 Fifth Avenue *New York 10, New York*

Quality
SHELLAC

BONE DRY BLEACHED

#65 REFINED EXTRA WHITE

#67 SEMI-REFINED

Particularly recommended in aqueous solution — because

- LOWER ACID NO.
- REQUIRING LESS ALKALI
- GIVING HIGHER LUSTRE
- GREATER DURABILITY
- GREATER FLEXIBILITY
- MORE WATER RESISTANCE

ORANGE SHELLACS — ALL GRADES

Agents in Principal Cities

South Braintree, Mass.—M. F. Robie & Sons
Kenmore, N. Y.—James O. Meyers Co.
Burbank, Calif.—H. C. Ross
Philadelphia, Pa.—Frances Patterson
Chicago, Ill.—Harry Holland & Son, Inc.
Baltimore, Md.—William McGill
Cleveland, Ohio—J. H. Hinz Company
St. Louis, Mo.—C. P. J. Erickson
San Francisco, Calif.—E. M. Walls
Danbury, Conn.—J. E. Pike
Canada—H. J. McAdie Co., Ltd.
Montreal and Toronto

Samples and Formulations will be furnished on request.

THE MANTROSE CORPORATION

Importers — Bleachers — Manufacturers

136-146 FORTY-FIRST STREET
BROOKLYN 32, N. Y.

Celebrates Twentieth Anniversary

C. R. Keeley, vice president and advertising manager of BEAUTY FASHION, began his twenty-first year with the magazine on January 2. Mr.

BUD KEELEY

Keeley had seven years' experience in the field before joining the organization. For several years he had been president and sales manager of Jardin de Rose where he planned and directed the sales and merchandising policies of the company. During this period he contacted every important cosmetic outlet from coast to coast and acquired a comprehensive view of the problems of both manufacturers and dealers. Mr. Keeley was elected a vice president of BEAUTY FASHION in June 1930 and was named advertising manager in May, 1935.

Dow Phenol Plant Completed

The Dow Company has completed new facilities expanding its phenol capacity by 30 million pounds per year.

Dow instituted manufacture of synthetic phenol in this country in 1915 and has long been a top supplier of the important chemical.

Squibb Coast Manager

Karl Emans has been appointed division office manager of the Los Angeles office of E. R. Squibb & Sons. He has been associated with Squibb since 1926.

New Gair Process

A new printing process for paperboard has been announced by the Robert Gair Company, Inc.

The Gair Company has made known they are printing folding cartons for the packaging field by a process which until the present has been limited exclusively to fine art types of reproduction. They are producing sheet-fed gravure printing on paperboard for the first time in this country.

Gravure presses built to Gair's specifications have been installed at the company's Piedmont plant. Previously, such presses were only adapted for printing on paper.

Now for the first time, absolute fidelity of reproduction on boxboard is assured. Sheet-fed gravure printing gives unusually faithful color reproduction. Gair gravure is already planned for cosmetic, food and many other fields where realistic and artistic reproductions of the commodity on the carton, aids in the sale of the product.

Yardley Buys N. J. Plant Site

Yardley of London has purchased approximately ten acres of land in Clifton, N. J., as the site for a new $1,500,000 factory, construction on which will begin in September.

Yardley representatives said they would build at Clifton a one floor plant containing 200,000 square feet of manufacturing space. They estimated 500 persons would be employed there.

The group gathered here are not a bunch of necktie salesmen trying out a new model but Max Miller being welcomed in the Squibb "Necktie Club" by W. L. Arscott. Mr. Miller's division was awarded this recognition at the Squibb year-end meeting for producing the leading sales volume in the country.

Ess. Oil Assn. Election

The officers of the Essential Oil Association of U. S. A. for 1949, were announced at the association's annual banquet January 7.

H. P. WESEMANN

H. P. Wesemann, Fritzsche Brothers Inc., was elected president of the association; Gerard S. Danco, Gerard S. Danco Inc., vice president; secretary-treasurer, George H. McGlynn, Magnus, Mabee & Reynard; The retiring president is William Schilling Jr., Norda Essential Oil and Chemical Company.

Drug & Cosmetic Agency Formed

Richard Strassburger has formed Strassburger Associates at 299 Madison Ave., New York to represent manufacturers in the drug and toilet goods fields. Mr. Strassburger was with the Allen B. Wrisley Company for 15 years.

The newly formed company will offer a complete sales and merchandising service to manufacturers interested in covering department stores, chains, wholesalers, syndicates and drug stores in New York and New Jersey.

Keil in New Package Spot

The Package Machinery Company has transferred William Keil from the New York office to Springfield, Mass., where he will take over the Western New England and upper New York State area formerly handled by Alan S. Lincoln, who is now serving on the staff of Tom Miller, vice president in charge of sales.

D & O New Branches

Dodge & Olcott, Inc., has opened branch offices in Atlanta, Dallas and Cincinnati. At the same time it was announced by the company that the managers of these branches would be for Atlanta, Earl W. Kersten; Dallas, William A. Kissel, and Thomas F. Callahan, Cincinnati.

Fine Perfume Bases

Created in California by

Albek

DISTINCTIVE • INDIVIDUAL

Write today for full information and price list.

Albert Albek, Inc.

3573 HAYDEN AVENUE, CULVER CITY, CALIFORNIA

Creators of fine perfume bases, bulk perfumes and colognes.
Aromatic chemicals, essential oils, natural flower oils, etc.

NUNCA VANA ALBEK

Thousands of Emulsifiers

THE AMERCHOLS ARE **NATURALLY** DIFFERENT!

CHOLESTEROL IN ITS MOST ACTIVE AND EFFICIENT FORM

These non-ionic, surface-active agents are NATURALLY good for the skin. Of biological origin, they represent odorless, color-free forms of cholesterol and related rare sterols which we isolate from animal tissues. The Amerchols are efficient, highly active emulsifiers, penetrants and emollients for cosmetics and pharmaceuticals.

WE KNOW OF NO CASE OF ALLERGY DUE TO AN AMERCHOL

Here is complete information: WRITE ON YOUR LETTERHEAD FOR OUR NEW TECHNICAL BOOKLET

Contains technical data on the use of the Amerchols in o/w and w/o emulsions. Formulas for cold creams, vanishing creams, antiperspirants, shaving preparations, emollient creams, ointments, lotions, hair preparations, etc.

OUR RESEARCH LABORATORIES ARE AVAILABLE TO YOU FOR ADVICE AND INFORMATION AT ALL TIMES.

AMERICAN CHOLESTEROL PRODUCTS, INC.
MILLTOWN NEW JERSEY

Dunney Named Ungerer Sec.

William H. Dunney, Jr. for the past thirteen years a perfumer with Ungerer & Company, New York, has been appointed secretary of the Company at a meeting of the board of the directors.

W. H. DUNNEY, JR.

Colton Co. Changes

The Arthur Colton Company of Detroit, Mich., has announced the following changes in its executive line up.

F. X. Roellinger, who has been associated with the firm for fifty-seven years, has retired and resigned the office of secretary. Mr. Roellinger became acquainted with the late Arthur Colton in 1891, at the age of twenty-three. He has been an officer of the company since its incorporation in 1909. He was instrumental in organizing sales representation throughout the world during the years the firms products were becoming known whereever pills, tablets and capsules were made. During the past fifteen years, Mr. Roellinger has been principally in charge of the sales of cigar wrapping and banding machinery. At the present no successor to his office has been named.

Alfred W. Kath has been elected as vice president in charge of engineering. He has been with the company since 1909, having now completed nearly forty years of service. During this long period, he has served in every productive department, and succeeded to the office of chief engineer in 1929. He is recognized as one of the foremost designers of pharmaceutical and special packaging machinery.

Nelson Carman, who has served as sales manager of the company for the past twelve years, has been elected vice president in charge of sales. He is a manufacturing chemist of long experience, and previously served in various productive and sales capacities with firms in this country and Canada.

Karl A. Panitz, has been elected as vice president in charge of production. Mr. Panitz has been with the Colton Company since 1945, serving as general plant superintendent for about three years. He held a similar position with Ansco, Binghamton, N. Y., for eleven years and before that he was with Sperry Gyroscope Company and R. Hoe Company for a combined period of eight years.

Garizio With Reheis

The Reheis Company, Inc., has appointed John E. Garizio to its technical service and sales division.

Mr. Garizio was formerly in charge of applied research at Sheffield Farms, Inc. Previous to that he had been, assistant to the president of Marvin R. Thompson Associates, and assistant to the director of the Warner Institute of Therapeutic Research.

Luckman Elected President of S & G Assn.

Charles Luckman, president of Lever Brothers Company, was elected president of the Association of American Soap & Glycerine Producers Inc., at the twenty-second annual convention of the association at the Hotel Commodore in New York.

At the same meeting, N. H. McElroy, president of Procter & Gamble Company, was elected, vice president for the Mid-West.

Re-elected to their posts were the following officers: E. M. Finehout, vice president, of the Los Angeles Soap Company, as vice president of the Far-West; Edward H. Little, president of the Colgate-Palmolive-Peet Company, as vice president for the East; Niles S. Dahl, general manager, John T. Stanley Company, as treasurer.

The association elected five new directors: J. L. Brenn, president Huntington Laboratories, Inc.; H. Dock, president, M. Werk Company, Cincinnati; B. F. Flynn, president, Pacific Soap Company, Los Angeles, E. B. Hurlburt, president, J. B. Williams Company, Glastonbury, Conn; and N. H. McElroy, president, Procter & Gamble Company, Cincinnati.

Philly Drug Exchange Reelects Officers

Malcolm W. Cox, of Eli Lilly & Company, was reelected president for 1949 of the Philadelphia Drug Exchange at the annual meeting on January 25. Also returned to office to serve during 1949 were: vice president, Paul S. Pittenger, secretary, J. Mervin Rosenberger, and treasurer, Harold C. Hablerstadt.

McNeil Promotes Shull

The McNeil Laboratories, Philadelphia, has announced the promotion of Harry H. Shull to the position of director of the central division. Mr. Shull has been with McNeil for 26 years and

H. H. SHULL

succeeds Dr. Charles E. Vanderkleed. Robert A. O'Dell and William R. Jones have been named as assistant directors of the control division.

City College Courses

A new Drug, Cosmetic and Toilet Goods program providing specialized business training for men and women in the retail, wholesale and manufacturing branches of the industry will be available at City College, Midtown Business Center.

The program will consist of two forty-five hour courses, retail sales, promotion and merchandising, and manufacturer and wholesaler operations. Both courses will cover the fundamentals of buying, pricing, promoting and advertising of drugs, cosmetics and toilet goods.

Heading the new center will be Seymour Jeffries, former director of the New York State Beauty Trades Research Bureau.

Registration for both the retailing and wholesaling courses is now open and will continue until March 1, when classes begin. The retailing course will meet every Tuesday evening from 7 to 10 P.M., and the wholesaling course will meet every Thursday evening from 7 to 10 P.M. at the City College Midtown Business Center, 430 W. 50 St., New York.

Monsanto Chemicals Ltd. Elects O'Neal Chairman

Edward A. O'Neal, Jr., has been elected chairman of Monsanto Chemicals, Ltd., British subsidiary of the Monsanto Chemical Company, to succeed Dr. Lloyd F. Nickell, who has resigned.

Bristol Ampul Case Dismissed

Judge Stephen W. Brennan of the United States District Court at Syracuse, N. Y., on January 25 dismissed the government's injunction suit against Bristol Laboratories to prohibit the firm from making interstate shipments of a number of its drug products packaged in ampuls. The injunction had been sought by the Food and Drug Administration on the grounds that the ampuls contained insoluble material in excess of what FDA considered lawful.

The case was dismissed on motion of counsel for Bristol Laboratories immediately upon conclusion by the government of the presentation of its evidence. The trial lasted only a little more than a week during which the highlight came in the examination of the government's principal witness, Dr. Frank Wiley, chief of the chemical branch of the FDA division of medicine.

The government's suit grew out of the rejection by FDA of a number of ampuls produced by Bristol Laboratories on the ground that they failed to meet the USP standard that they be "substantially free" of insoluble material.

The government made no claims that the public health was involved but only that the ampules failed to meet the USP standard.

While he was on the stand, Dr. Wiley was asked to examine more than 100 ampules of the Bristol products to show the court what standard is followed in determining whether the products are "substantially free" of insoluble material. Among those submitted for examination were thirty-seven that had been previously rejected by Dr. Wiley and which led to the government bringing the suit. They could not be identified as such, however, and in the course of his examination Dr. Wiley passed the greater majority of them and picked out less than a half a dozen which he regarded as not being "substantially free."

Judge Brennan dismissed the case without Bristol having to put any of its witnesses on the stand.

Harris Named Among Top Ten

R. N. W. Harris, president of The Toni Company, has been named one of the "ten outstanding young men in 1948" by the U. S. Chamber of Commerce.

R. N. W. HARRIS

Mr. Harris was the only businessman named on the list, which was chosen by 13 judges including Dwight D. Eisenhower and Harold E. Stassen.

Corwin Resigns Borden Chemical Division Post

Dr. John F. Corwin, chemical director of the chemical division of the Borden Company, has resigned from that post, effective today. He has occupied the position of chemical director since 1944, when he returned to the Borden organization from the plastics division of the American Cyanamid Company.

Dr. Corwin had been director of the research laboratories of the Casein Company of America Division of the Borden Company, later renamed the chemical division, until 1941, when he was released to become head of the resins and plastics section of the Office of Price Administration.

Pfizer Advancements in Production and Sales

At a banquet January 8, climaxing the company sales meeting, John L. Smith, president of Chas. Pfizer & Company, Inc., announced the promotion of a number of production executives at two Pfizer plants.

Herman A. Poitras, former superintendent of the Terre Haute plant has been made general production manager, and D. C. McClain has been appointed director of engineering of all company plants.

At the main plant in Brooklyn, H. L. Denzler was named superintendent. A. J. Greene and E. H. Eppig, assistant superintendents. W. R. Townsend was named as head of the engineering department.

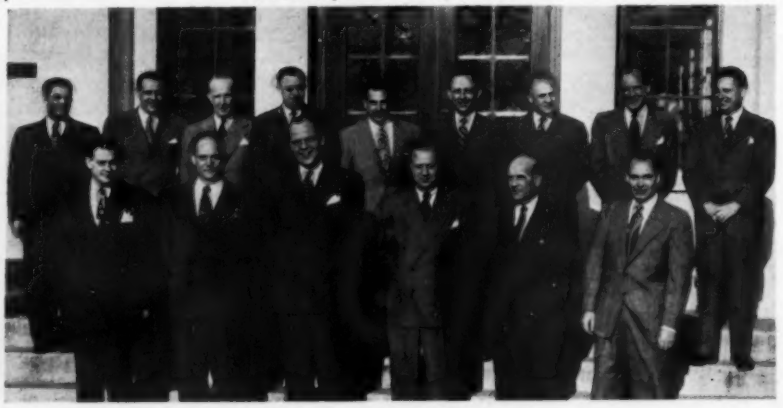
At the Terre Haute plant, B. J. Quinn was appointed superintendent with E. J. Massaglia assistant superintendent.

Under the direction of Fred J. Stock, recently appointed vice president in charge of sales, the sales department internal organization has been expanded and several new departments have been formed. The new staff service managers are E. J. Goett, who heads the sales development department and M. N. DeNoyelles, in charge of the sales service department. Other staff departments under Mr. Stock are export, with D. A. Hilton as manager and advertising headed by E. W. Whitney.

R. H. Briggs was appointed manager of the newly formed industrial sales division, and C. P. Walker was named head of the medicinal chemicals and antibiotics sales division.

Several changes in field sales management were also announced; R. G. von Bernuth, formerly Western sales manager has been promoted to manager of the Eastern sales region. P. Weber, will be acting manager of the Western sales region. N. A. Grimm, a director of the company, continues as manager of the Midwestern sales region in Chicago.

The nine division sales managers of Hoffmann-La Roche Inc., are pictured at the company's sales meeting in January, with members of the Nutley staff. Top row, Left to Right: W. P. Freeman, P. P. Zambas, J. B. Keenan, R. W. Smith, C. W. Betzer, P. G. Hacker, T. Brown, W. M. Monday, L. H. Chambers. Bottom row: R. C. Keppler, H. L. Drye, L. D. Barney, R. A. Hardt, E. W. Marti, F. C. Sands.



Finnish Manufacturer Wants Licenses

Companies interested in having an outlet in Finland for cosmetic materials might, if they are interested, contact H. E. Blafield, Oy Fakta Ab, Helsingfors.

While import restrictions in Finland are severe, limited imports are permitted for raw materials for cosmetics from France and Holland. And American firms, by arranging to have their products manufactured in Finland, can to some degree overcome the difficulty of import limitations.

Roche-Organon Changes Name

Roche-Organon, Inc., Nutley, N. J. has changed its name to Organon Inc., and has moved its headquarters to Orange, N. J. The telephone number at the new location is Orange 6-1600.

Weisman Back from Europe

J. L. Weisman, director of sales, Felton Chemical Company, N. Y., has returned from a two months tour of Europe, where he visited suppliers in France and Italy.

Mr. Weisman said conditions are improving rapidly on the continent and are considerably better than they were two years ago, due in large measure to Marshall plan money. He stated that morale is at the highest point since the termination of World War II.

Emulsol Rep.

The Emulsol Corporation is now represented in the sale of its surface active chemicals, in the states of Ohio and Western Pennsylvania by the Hukill Chemical Company, 4614 Prospect Ave., Cleveland 3, Ohio.

Young in Squibb Foreign Operation

Charles A. Young, appointed director of Overseas Plant Operations of E. R Squibb & Sons International Corporation and Inter-American Corporation, is responsible for technical control of product quality and functional administration of manufacturing in laboratories in Buenos Aires; Sao Paulo, Brazil; Montreal; Cali, Columbia; Havana; Mexico City; Montevideo; and various European locations. In 1946, Mr. Young was Bell System Communications Coordinator at United Nations Headquarters at Lake Success, following war service as Colonel with the Fifteenth Air Force and as Chief of Intelligence Branch Air Division U. S. Group Control Council in Berlin. Recently he was administrative assistant to the vice-president and director of manufacturing laboratories of Squibb.

Two Added to Abbott Research Div.

Two new members have been added to the pharmaceutical research division of the Abbott Laboratories research department. They are Dr. Paul R. Rasanen, and Leonard S. Andrews.

Previous to joining Abbott, Dr. Rasanen was an instructor in pharmaceutical chemistry at the University of Washington, Seattle. From 1944 to 1946 he was in the Navy, working at the entric pathogen department of the National Naval Medical Center at Bethesda, Md.

Mr. Andrews is currently completing work for his degree of master of science in pharmaceutical chemistry at the University of Illinois. During the war he was a chief pharmacist's mate in the Navy.

Named VP of S & D Domestic Sales

John G. Bill has been elected vice president in charge of domestic sales of Sharp & Dohme, Inc., the company has announced.

A veteran of more than 23 years association with Sharp & Dohme, Mr. Bill began his career in 1925 as a sales representative in the company's New England district.

On Pfizer Research Staff

Theodore M. Vial, who recently completed work for a Ph.D. in organic chemistry at the University of Illinois, has joined the research staff of Chas. Pfizer & Company, Inc.

Gartlan Recovering

Joseph Gartlan well-known sales representative in the cosmetic industry for Theo. H. Foster Company of Providence, R. I., and the Crystal Plastic Company of New York, is recuperating at the North Country Community Hospital, Glen Cove, L. I. His many friends in the industry wish him a speedy recovery.

Packaging Institute Convention Date

The Eleventh annual forum of the Packaging Institute will be held October 24, 25, and 26, 1949 at the Commodore Hotel, New York.

Elected by Chemicolloid

David F. O'Keefe, former vice president of Chemicolloid Laboratories, Inc., has been elected president. He succeeds George H. Rider, who becomes chairman of the board.

Johnson in McNeil Sales Spot

Clark H. Johnson has been appointed director of foreign sales of McNeil Laboratories. Mr. Johnson has been in the export field for several pharmaceutical companies for the past fourteen years.

Pharma Buys New Site

The War Assets Administration has announced approval of the sale of a portion of Port Johnson Terminal, Bayonne, N. J., to the Pharma Chemical Corp. of New York for $141,000 cash.

The property fronting on the Kill Van Kull river, will be used by the corporation for the manufacture of dyestuffs and intermediates.

McNeil Appointment

McNeil Laboratories announce the appointment of John Hogan as director of advertising. Mr. Hogan, who joined the Philadelphia firm in 1943, was formerly advertising production manager.

Charles A. Mace

Charles Austin Mace, secretary of the Synthetic Organic Chemical Manufacturers Association since 1927, died of a heart attack at his home January 3. His age was sixty-eight.

Trained as a chemical engineer at the Massachusetts Institute of Technology in 1901 he was employed by the Dominion Textiles, Ltd., of Canada and subsequently by Armour & Company, the Badische Company and Butterworth, Jordan Corporation of Philadelphia.

He leaves his wife and two daughters.

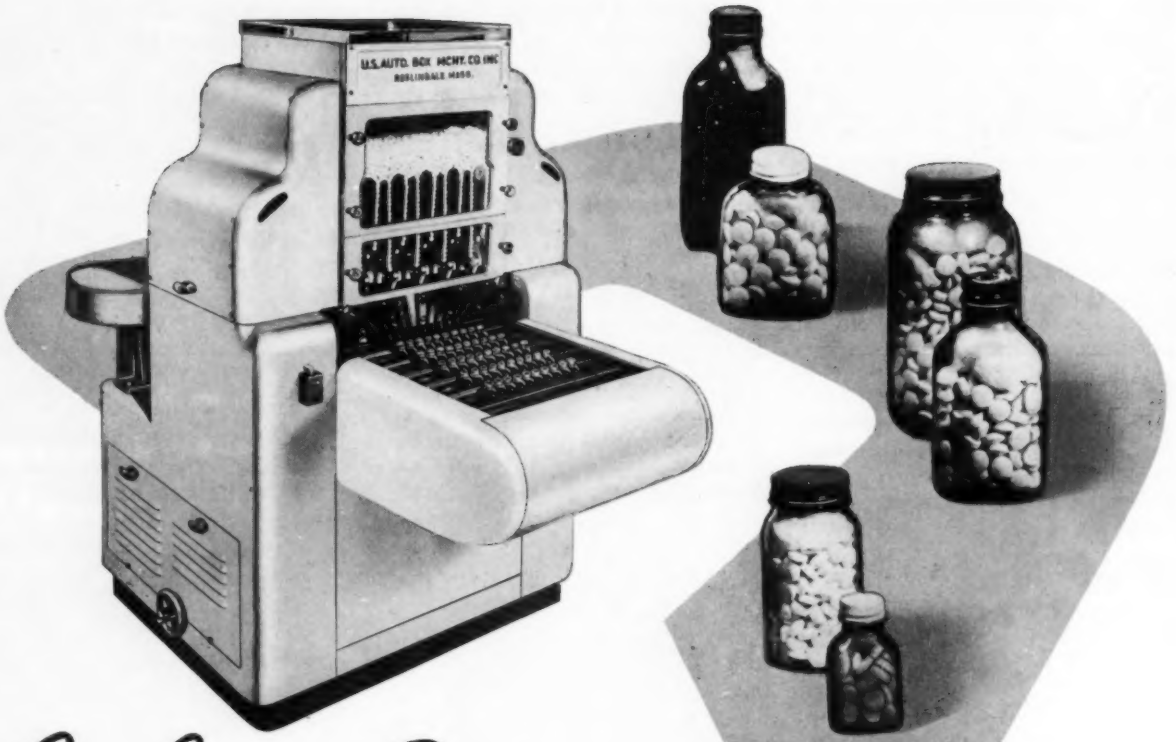
Albert K. Epstein

Albert K. Epstein, senior partner of Epstein, Reynolds and Harris, and the founder of Emulsol Corporation, died December 22, 1948 in Palestine.

Born in Poland, Mr. Epstein arrived in the U. S. at the age of fifteen. He was on a visit to Palestine when he suffered a heart attack and was buried in the City of Tel Aviv.

B. T. Nolting

Bernard T. Nolting, 61, secretary of Welch, Holme & Clark Company, Inc., died at his home January 12. Mr. Nolting joined the company in 1905 at the age of 17. He is survived by his mother and two brothers.



Cut Costs of Packaging

TABLETS and PILLS

New *US* Machine Makes Counting & Filling Completely Automatic

Performance-proved by one of the country's leading drug manufacturers, the new *US Automatic* Tablet Bottling Machine handles any count, odd or even, from 12 to 500, in rigid containers up to 3" in diameter and 7" in height; and is adaptable for packaging tablets, coated or uncoated pills, and some capsules.

Available in two models, the high speed machine delivers up to 120 filled containers per minute. A smaller unit, designed for lower volume requirements, gives speeds up to 50 per minute.

Equipped with bottle intake conveyor and delivery conveyor, the operation of either *US* model is *completely automatic.* Yet, when large count filling at slower speeds makes it desirable to load the machine's feed table by hand, the intake conveyor may be omitted.

Whichever *US* model or loading procedure is employed, the containers move down the machine's feed table in clean, gleaming rows, and receive from the counting head exactly the right number of tablets. Throughout the filling operation, the containers are vibrated to settle the tablets. The filled containers are discharged automatically by conveyor for delivery to the next operation.

Correct count is a mechanical certainty. There is no breakage . . . if tablets go into the machine whole, they come out whole. Maintenance of Purity is absolutely assured. Labor costs are reduced to a minimum. And since change-overs in product, count, or container size, take only a matter of minutes, one *US Automatic* Tablet Bottling Machine can handle a wide variety of packaging problems. Always fast and accurate, the entire machine is functionally designed for versatile yet foolproof and economical operation.

Write for complete details concerning how the new *US Automatic* Tablet Bottling Machine can make *your* packaging of tablets and pills *completely automatic.*

US

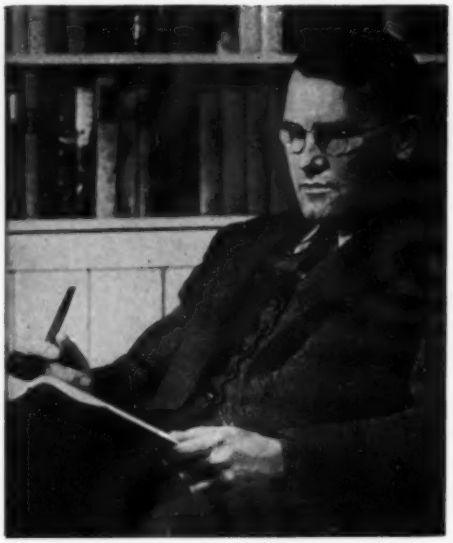
AUTOMATIC BOX MACHINERY CO., Inc.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

45 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York ★ Cleveland ★ Chicago ★ Los Angeles ★ (Krugh Equipment & Supply Co.)

Production Forum



By FRANCIS CHILSON
Industrial Consultant

Factory Landscaping

As an industry we have paid very little attention to factory landscaping, most of us regarding it as an expensive form of decoration—expensive to install and maintain. But there is an important economic background to landscaping, which when it is understood, will bring the realization that complete landscaping is a self-sustaining, self-liquidating investment.

You have witnessed the increasing adoption of partial and complete air conditioning. You have observed an increase in the number of windowless buildings. When we lose our prejudices about the importance of outside outlook and outside light, it is not unreasonable to predict that in this industry within twenty-five years all new factory construction in suburban and country areas will be windowless. Engineers already know the effect of windowless construction on the installation and operating cost of air conditioning equipment. And architects have, in good landscaping, a means of relieving the barren appearance of windowless buildings.

Even if you have not now and never will have a windowless building, proper landscaping is of paramount importance because of the possibility of using vegetation to insulate walls and shade windows. A building shrouded with ivy is not only attractive to look at but it keeps walls from heating up in summer and thus has a direct and substantial effect in reducing the operating cost of air conditioning equipment. The economy is even more pronounced when vegetation is used to shade windows, which when exposed to the direct sunlight, have an enormous effect in decreasing the operating efficiency of air conditioning equipment.

I think also that we should plant our roofs, from which we suffer the greatest heat penetration in summer and the greatest heat loss in winter. Heat in summer not only penetrates through the roof in summer even though it is insulated but on tar-slag roofs heat creates blisters which when walked on crack and cause leaks. As a coolant the evaporative efficiency of growing plant material is very high.

I realize there is a weight problem to be considered but a roof need not be covered with anything but shallow rooted alpine plants such as one sees everywhere in rock gardens. Creeping or ground phlox, for example, will survive and thrive luxuriantly in an inch of soil. On existing roofs shallow trays of earth could be spaced at intervals and the creeping plants allowed to spread from them over the whole roof. I recommend that you experiment with this idea next spring. There are many types of ground ivy that are shallow rooted and very prolific growers, which you might use as a start. If you are building a new building the problem of designing a roof to carry appropriate vegetation is very simple. I doubt very much if it would cost anywhere nearly as much as a water-pool roof which many plants are adopting. A planted roof not only will provide excellent insulation but, by keeping the roof itself damp and cool, will prolong its life.

There is another aspect of roof planting I should like to call to your attention and that is the excellent means it affords of concealing the building from the air. By planting a few low spreading evergreen shrubs, such as Fitz's juniper, which spreads and overhangs, along a roof parapet the severe rectangular roof outline of a building could be broken, and this, together with appropriate foundation planting and wall-shrouding ivy, would cause the building to be invisible from the air.

I am not one of those foolish idealists who thinks we have seen the last of war, and since war has become less a problem of killing men as it is one of destroying his economic installations as rapidly as possible, it is good sense now to consider means of concealing our factories while there is still time for plant material to mature. Remember how the western aircraft plants were camouflaged during War II by creating canvas villages on

"production has exceeded our highest expectations"

Four 175 psi Lukenweld Jacketed Steel Drier Rolls in the drier section addition designed and built by Lukenweld for Elk Paper Manufacturing Company of Childs, Maryland.

...with this Lukenweld drier section addition

Co-operation between operating men with drying problems and Lukenweld engineers brings in frequent reports like this one from Elk Paper—increased output, higher quality production, safer operation.

As designers and manufacturers of complete drying machinery, we at Lukenweld are well acquainted with drying operations in many industries. We'll take your ideas and put them to work—first a design on paper, then a pilot model if desirable, a finished machine or structure, and its installation. Lukenweld service is that complete.

If the job calls for Drier Rolls... Hundreds of Lukenweld Jacketed Steel Drier Rolls, in service today in the paper, chemical, drug, food, plastic and other industries, are proving they'll do the job faster, better and safer *Faster* because of reduced wall thickness and positiv· scavenging of entrapped air, condensate and film from steam passages, assuring higher efficiency. *Better* because surface temperatures are even and constant. *Safer* because of their high-strength, steel plate construction.

For drying help, or for Bulletin 358 telling about Lukenweld Drier Rolls, write Lukenweld, Division of Lukens Steel Company, 482 Lukens Building, Coatesville, Pennsylvania.

We'll lend you "LUKENWELD", a 16mm motion picture with sound, highlighting our methods, facilities and products. Running time: 20 minutes. Write for booking date.

LUKENS
LUKENWELD DIVISION

DESIGNERS, ENGINEERS AND MANUFACTURERS OF MACHINERY

• • SPEED SCRAP TO THE MILLS TO MAKE MORE STEEL • •

top of them? That's very expensive! Plant material will conceal your plant and pay for itself by keeping your buildings warmer in winter and cooler in summer. I know some engineers cling to the fallacy that ivy destroys the brickwork but in my opinion that's the bunk. In England and Ireland I saw many buildings hundreds of years old completely shrouded with ivy. I think this is one reason they lasted so long.

There are many other reasons why you should landscape extensively. Let's review some of them. Your own sense of pride and community spirit alone should compel you to do it. If you are located in an industrial slum you can take the initiative and others soon will follow suit. There is no better means of cleaning up factory grounds and keeping them clean than to do a good landscaping job. If you are located close to or in a residential area you will find if your plant is well landscaped, that you will get fewer complaints from your neighbors. You wouldn't enjoy living near a filthy factory with a dooryard full of weeds yourself even if you owned it, so why should you force others to do so?

A well landscaped plant has excellent local advertising value. If it is located on a mainline railroad or on a trunk line highway, and if moreover, the planting is exceptionally well done you will find that people will talk about your factory far and wide even if they do not know what you make.

But most important of all perhaps is the effect of good landscaping on employee morale. People like to work in an attractive plant and the more attractive it is the more they like to work in it. There are dozens of examples in troublesome labor areas where people continued working undisturbed by local strife simply because they liked to work in attractive plants. It makes for contentment and pride. In my own professional experience I have seen many instances of the effect of good surroundings on operating costs. In one outstanding instance a branch plant making the same products with the same machinery as three other plants owned by the same company, has always enjoyed higher production ratios and substantially lower operating costs than any of the other plants.

Landscaping can be used for concealment of parking lots, which must be located close to buildings and which at best are dusty, unsightly, hot in summer, cold in winter. Landscaping also can be used to conceal out of door drum storage and carboy areas, tanks, refuse dumps etc.

Car parking should be arranged in sweeping curves marked out with strips of earth in which can be planted at intervals tall growing wide branched trees such as maples. The trees will keep the cars cool in summer; they will conceal the parking lot from public view and from, in war time, aerial enemies. Also they help to keep down dust by keeping the ground under them more moist than exposed ground. Bare stretches of exposed ground or black top reflect heat against your buildings thus influencing your comfort problem and the effectiveness of your air conditioning means.

Landscaping has an important bearing in protecting your plant—offices and laboratories especially—against exterior noise. This feature of landscaping is important if you are located close to a busy railroad or trucking highway. A close planting of evergreens interspersed with a few Lombardy poplars has an amazing effect in deadening sound.

To summarize: landscaping is important for morale and productivity of workers and even more so for brainworkers such as office and laboratory people; it is important as insulation; it is important for concealment of unsightly out of door features and fixtures; it is important as a means of concealment against potential enemies; it is important as a means of preserving painted exteriors and masonry; it is important as a community contribution; it is important as advertising and as a means of manifesting self respect and pride in your own products.

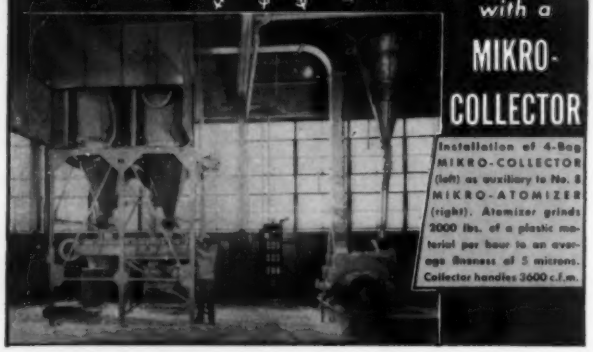
Ampoule Inspection

At various times I have taken a crack at the futility of attempting to solve ampoule difficulties by electronic inspection, which, to my mind, is an excellent example of attempting to solve a problem without defining it. As I have often pointed out the major problem of producing ampoules is not inspection; it lies before that. This view was supported by Ted Clumpp who, in his presidential address before the APMA meeting in December, said:—

"Some have said there is no solution to the problem until we have an electronic machine to set our standard for us. This is, I am convinced, an utterly unrealistic approach to the problem. In the first place the machine is not now available and will probably not be for another five or six years, secondly, there is nothing magic about such a machine. It must also be set on the basis of standards that we can agree on and meet. It must also in the last analysis set a standard based on what the industry can do under conditions of "good pharmaceutical practice." There is no escaping this whether we use the human eye, an electronic machine or even an atom pile to test our solutions."

Amen! say I to that. If the associations spend any more money on this unsound idea, it will be evidenced that they have money to waste. Before the associations laid their thick wad of greenbacks on the barrel head at the beginning of this futile venture, I could have told them that the idea was *non compos mentis* and why. Several years before I had toyed with the idea myself—long enough to realize that inspection wasn't the problem at all and that in the absence of solution standards upon which the government and we could all agree, an electronic inspection machine, even if it were practical, automatic, fast, simple, inexpensive and foolproof—which this one never will be—would give us little help in an operation of which inspection is only a minor phase. I respectfully suggest to the two trade associations, which financed this expensive bambino, that if

Keep Your DUST Out of the Air
and Your PROFITS in the Bag—
with a
MIKRO-
COLLECTOR



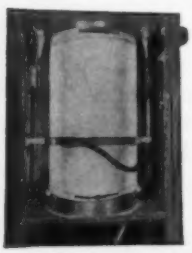
Installation of 4-Bag MIKRO-COLLECTOR (left) as auxiliary to No. 8 MIKRO-ATOMIZER (right). Atomizer grinds 2000 lbs. of a plastic material per hour to an average fineness of 5 microns. Collector handles 3600 c.f.m.

The new MIKRO-COLLECTOR*, which supplements the well known line of MIKRO-PULVERIZERS and MIKRO-ATOMIZERS, is truly a triumph in the art of dust collection. For, it is radically different from any other system of its type. The revolutionary principles employed insure optimum dust recovery and sensational filter rates.

With its perpetually clean filter of hard-pressed wool felt, the MIKRO-COLLECTOR has proved its ability to handle highly concentrated dust loads. It performs with equal efficiency as an auxiliary to any type of grinding machinery, or in general air clarification. Made in single and multiple-bag units of varying bag lengths to meet individual requirements.

An ideal direct discharge combination has been designed to merge the functions of grinding, filtering and collecting in one compact unit. It consists of a MIKRO-PULVERIZER discharging directly into a MIKRO-COLLECTOR situated immediately underneath. In many plant layouts this combination is a "must." It simplifies flow of materials . . . saves time in operation, collection and cleaning. Pulverizer and Collector can be washed down simultaneously after bag has been removed.

Another similar dust-saving, profits-making arrangement, adaptable to larger production operations, includes a MIKRO-ATOMIZER used in combination with the MIKRO-COLLECTOR, as shown in the above illustration.



Interior view of Single-Bag MIKRO-COLLECTOR

If you have a dust control problem let our engineers study it for you. Our research laboratory and test facilities are available without charge or obligation.

*Patent applied for by H. J. Hersey, Jr. and Pulverizing Machinery Company

PULVERIZING MACHINERY COMPANY
22 Chatham Road Summit, N. J.

MIKRO-COLLECTOR
Reg. U. S. Pat. Off.
By the makers of
MIKRO-PULVERIZERS and MIKRO-ATOMIZERS

MACHINERY AND EQUIPMENT

From Agitators to Wrapping Machines

Drug and Cosmetic Review is the source book on where to buy drug and cosmetic manufacturing and handling equipment.

Alphabetically listed is every type of equipment used in this industry.

Descriptive paragraphs under each listing describe the operation of each type of equipment.

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An invaluable reference book for plant managers, purchasing agents, executives.

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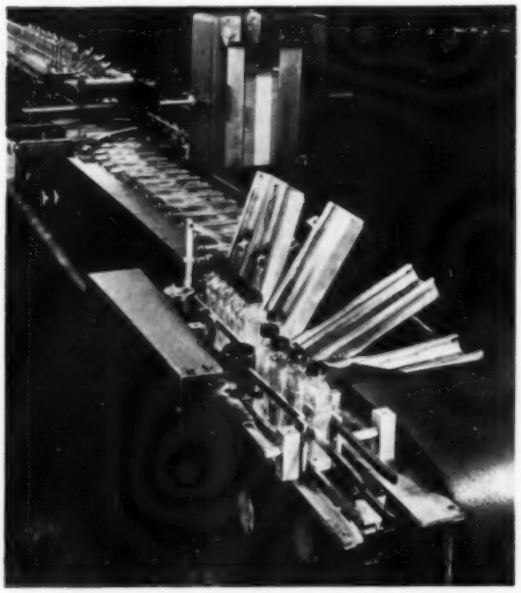
they get any more brainstorms like this one I shall be glad to chip in my two cents in exchange for a fee—in dollars—before they lose more dollars.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Ross Cartoners

Ross cartoning machines are now available in 3 sizes. Operating rates, vary with the commodity being handled and the ability speedily to load it into the machine. The usual range runs between 60 to 200 cartons per minute, and, in certain cases, up to 280 cartons per minute can be handled. Speeds are easily adjusted by a Master Motor Speedranger.



At present three sizes of Ross automatic cartoning machines are in production. Model "A" will accommodate cartons measuring up to a maximum of 10" overall length in the flat. The minimum size carton that the model "A" will handle measures 2-¼" in length after the carton has been tucked. Model "B" handles cartons having a maximum length of 14" in the flat with a minimum restriction of 4" for tucked cartons. Model "C" takes cartons up to 18" long in the flat. The minimum length handled by the model "C" is 6" for a formed and tucked carton.

In changing over the machine from one size package to another, all adjustments are made by setting movable units that are dial controlled against numbered scales. A chart is furnished with each machine. By following numerical sequence on the chart, the operator can quickly and accurately set the machine for any size cartoning operation within its range. Chart settings are supplied for carton sizes as specified by the purchaser. However, blanks are provided on the chart permitting tabulation of additional settings should future production needs make necessary adaptions to other than listed carton sizes. A Ross cartoning machine can be converted from one size cartoning operation to another within a very short period of time.

A particular feature of the Ross cartoning machine is the shape of the carrier pockets which are tapered. The pockets are designed to accommodate the largest product within the machine's range. Smaller products naturally slide down to the base of the taper to rest against the guiding edge of the pocket which is the determining factor in setting the machine for any size carton.

Ross engineers have developed a method for imprinting code dates and other data on the flap or face of a carton. The imprint is done by rotary press methods to provide a neat, clear printing job.

The most recent Ross development is a literature inserting device. By the use of air, pre-folded circulars are separated and automatically fed into position ahead of the load. When the load enters the carton, the circular goes with it. In case of bottles, the circular wraps itself over the cap and down both sides of the container. Through making a standardized product in a field normally served by virtually custom built equipment, the Ross organization has been able to thoroughly tool their plant for economical volume production. Further, wherever possible, standard stock sizes of gears, bearings and chains are used. To reduce maintenance, the entire machine can be assembled or disassembled with a set of Allenhead wrenches since only this type of screw and bolt is used.

In the matter of materials, liberal use is made of stainless steel, and aluminum for parts that come in contact with the carton to eliminate corrosion and possible defacing of the package. All other operating parts are rust-proofed or coated with paint. Housings are finished with baked "crackle" enamel. Ross has standardized on a special shade of green as the color for all external surfaces. This is a neutral tone that is easy on the eyes and harmonizes with most surroundings.

The Ross cartoning machine, too, has been engineered to operate with a minimum of noise. For example, the sliding loading blocks are made from a plastic material to avoid the clashing that would normally occur from metallic contact at this point. The loading mechanism lies down on the carrier bed with a gradual movement both to minimize sound and to permit the handling of delicate products such as radio tubes.

As a further innovation, the Ross cartoning machine has been made so that the carton never comes to a stop from the time it leaves the magazine until it is ejected from the machine after having been opened, loaded and closed. This smooth, quiet method of operation is accomplished without levers, reciprocating or intermittent movements, Ross cartoning machines quickly, economically package practically anything you can carton by hand.

New Tablet Bottling Machine

The U. S. Automatic Box Machinery Co., of Roslindale, Massachusetts, has recently announced the availability of a new Tablet Bottling Machine which makes the packaging of tablets, coated and uncoated pills, and some capsules, a completely automatic operation.

Offered in two models, the high speed machine delivers up to 120 filled containers per minute and the smaller unit gives speeds up to 50 per minute. Either machine handles any count, odd or even, from 12 to 500, in rigid containers up to 3″ in diameter and 7″ in height.

Proved in actual use by one of the country's leading drug manufacturers, the machine is equipped with a bottle intake conveyer and delivery container to make packaging operations completely automatic from start to finish. Yet, where large count filling makes it desirable to load the machine's feed table by hand, the intake conveyer may be omitted.

Whichever model or loading procedure is employed, the containers move down the machine's feed table in clean, gleaming rows and receive from the counting head exactly the right number of tablets. Correct count becomes a mechanical certainty and if the tablets go into the machine whole, they come out whole.

Throughout the automatic counting and filling operation, the containers are vibrated to settle the tablets and at completion of filling are discharged by conveyer to the next operation. Thus labor costs are reduced to a minimum and maintenance of Purity is absolutely assured.

Functionally designed for versatile yet economical operation, change-overs in product, count, or container size, take only a matter of minutes, making possible the handling of a wide variety of packaging problems with only one machine.

Detailed information concerning how this interesting new Tablet Bottling Machine cuts packaging costs by making counting and filling completely automatic, may be secured by writing the U. S. Automatic Box Machinery Co., Inc., 18 Arboretum Road, Roslindale, Boston 31, Massachusetts.

Centrifugal Pump

Eastern Industries, Incorporated has just developed a new centrifugal pump designated as Model H. This unit is designed specially for those applications where moderate pressures and volumes are required from a centrifugal pump running at 1725 rpm.

The performance curve on the new Model H shows a shut-off pressure of 19 psi, 10 gpm at 15 psi, 15 gpm at 10 psi, and in excess of 20 gpm at free flow.

The pump is constructed in either bronze or aluminum, with lifetime mechanical rotary seal. The inlet is ½″ N.P.T. female and the outlet is ⅜″ N.P.T. male. A ⅛″ N.P.T. drain plug is located in the pump body. Units are available with motors ranging from 1/6 hp to 1/3 hp, depending on operating range desired. With 1/6 hp motor, the overall size is 12-⅛″ long x 7-⅜″ high x 8-3/16″ wide and the weight in bronze construction is 37 pounds.

Model H pump is a highly efficient slow speed centrifugal pump designed for long life, rugged, trouble free applications. At the present time the pump is available only for quantity applications, or for sample on a trial basis.

Drum Taper

A new semi-automatic machine for applying standard pressure (masking) tape to drums, roll goods, canisters, cartons, etc., on a production basis, is being introduced by The Lake Laboratories Company, Clifton Heights, Pa. Under actual tests, it has reduced the manual tape sealing time by as much as 400 per cent.

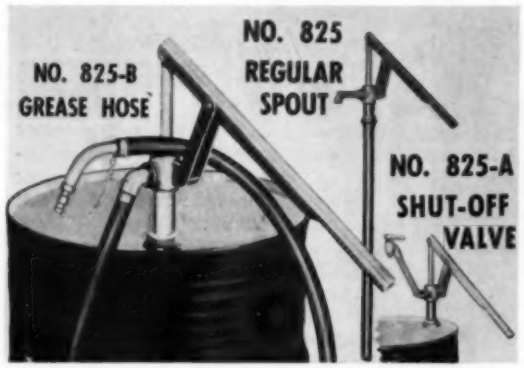
The Lake Tape-Sealing Machine has only one moving part. Packages up to 17″ diameter are placed between adjustable spring clamps. One complete hand revolution of a swivel arm feeds the tape evenly and neatly to the package. The tape is cut by a blade. The swivel arm is available in any height (length) up to 28″ and is mounted in an oilless bearing. Maintenance costs are nil. Unit weighs 40 lbs., and sells for $42.50 F.O.B. factory.

New Drum Pump

Special spider design of the piston and intake opening provides a cut-through action and large capacity that handles any fluid, which seeks its own level, except lacquer thinners. Heavy greases are pumped at rates up to 3 gallons per minute and even higher for alcohol

and other light fluids. Smooth flow is maintained as air pressure, created by pump action, eliminates splashing and waste.

Installation is easy and rapid, pump simply screws into drum bung. The bung bushing fits both 2″ and 1½″ barrel openings on 15, 30 and 60 gallon drums.



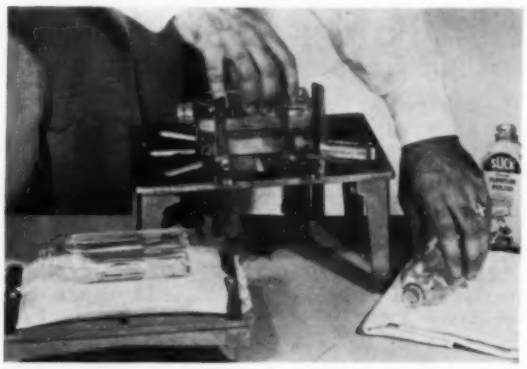
The pump is available in three economically price models: equipped with regular spout for general use (No. 825) at $9.75; equipped with shut-off valve to eliminate losses by evaporation (No. 825 A) at $11.25; equipped with 8 foot grease hose (No. 825 B) at $14.50.

Order direct from General Scientific Equipment Company, 2700 W. Huntingdon Street, Philadelphia 32, Pa., or write for descriptive literature.

Hand Labeler

The new E-Z Hand Labeler is the result of many years of manufacture and experimentation by the Mandel Products Co. of 207 Astor Street, Newark, N. J. The unit is small, sturdy, compact and highly efficient. It is designed to hand-label gummed labels, on flat or semi-round bottles in any size from one-half ounce to one quart at the rate of 30 units per minute.

After the first bottle is placed into the guides, the left hand ejects it while the right hand moistens another. From this position, the right hand places the moistened bottle into the guides for labeling while the left hand



presses the label firmly against a pad. Once this sequence of operation is mastered, the speed is amazing.

The E-Z Hand Labeler requires only a few minutes to change the guides to fit almost any size label or bottle, and once set, you are assured of consistent, perfect, uniform labeling. Other features of the E-Z Labeler include minimum bottle breakage; low upkeep and operating cost because there are a minimum of moving parts.

Complete information, including cost, will be furnished on request by Mandel Products Co., 207 Astor Street, Newark 5, N. J.

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A completely new line of Stainless Steel Storage and Mixing Tanks has been developed by the Alsop Engineering Corporation, 400 James Street, Milldale, Connecticut.

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For concerns who already have or prefer to use portable electric Mixers, Tanks can be supplied with a bracket to which any Portable Mixer can be clamped.

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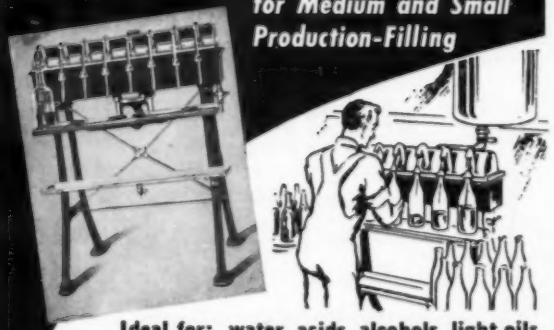

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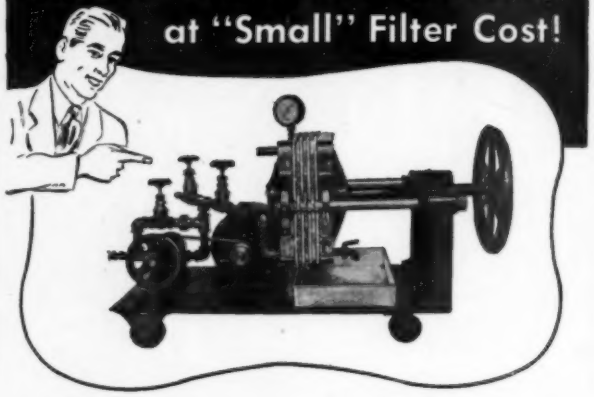

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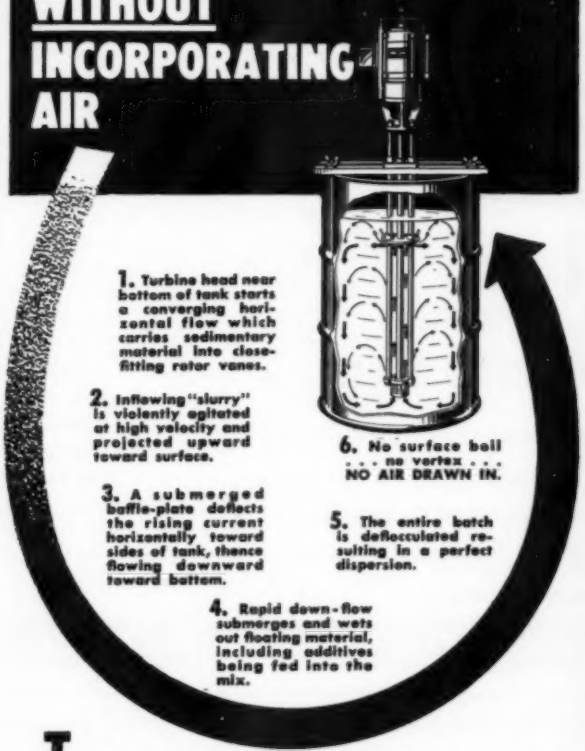
EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR


1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

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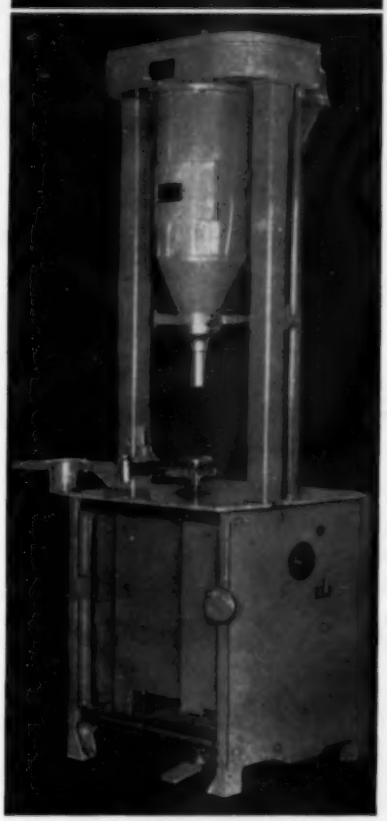

Packaging costs stay down—production stays up! That's because the Universal Filler is built for steady and rapid filling . . . with LOW operation and maintenance costs.

The Universal Filler is versatile, too! Our customers are using it to handle 150 different kinds of materials (Powders, Granules, Pastes), filling practically every size and shape of bottles, boxes, cans and bags. It can be changed over for different materials and containers in a very few minutes.

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* Sanitape-Sealtite is a unique method for packaging pills, tablets, capsules, creams and powders, by which each unit or unit-dose is sealed in its own air-tight compartment—assuring complete protection and maintained efficacy. Packages, machines and methods fully covered by U. S. and Foreign Patents and Patents Pending.

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Industry's Books

Techniques of Systems and Procedures, by H. John Ross, Manager Systems and Procedures Department of Continental Can Company, 341 pp., Office Research Institute, New York, $15.

This is stated to be the first published book devoted entirely to Systems and Procedures techniques. The author has had many years of experience both in public practice and industrial companies. This experience has been reflected in numerous magazine articles on office and systems subjects. He taught the first university course in Systems and Procedures, and currently is lecturing under the auspices of Office Research Institute, Inc. Following are some of the subjects included in this book: How to Make a Clerical Survey; Analyzing Clerical Operations; Interviewing Techniques; Getting Cooperation; Making Process and Procedure Charts; Designing, Eliminating and Controlling Forms; Making a Manual; Selling Improvements; Motion Analysis; How to Rate Yourself. There are 75 pages of charts, forms and other illustrative material included in this book.

Modern Packaging Encyclopedia 1949, Edited and published by the Staff of Modern Packaging Magazine, 990 pp., Packaging Catalog Corp., New York, $6.50. Canada $9. Foreign $11.00 including postage.

The Encyclopedia is arranged in 9 major sections which cover each step in the planning and production of successful packages. The book proceeds with a discussion of packaging in specialized fields, which answers the basic packaging problems of each of 17 major product categories, including drugs, foods, beverages, hardware, candies, tobacco products, cosmetics, chemicals and the like. There is a 44 page treatment of packaging planning fundamentals, which outlines the preliminary thinking and research involved in planning a new package or modifying an old one. The fourth section "Materials of Packaging," contains a complete analysis of the types and properties of the various materials used in packaging. Next in the sequence is a 132 page section on "Packaging Forms," which describe and evaluate all the types of packages known to industry, folding boxes, cartons, etc. About 160 pages is devoted to machinery and equipment for the package production line. The 90 page Buyer's Directory contains information on where to buy materials and supplies, containers, machinery and equipment, and services.

Bacterial Chemistry and Physiology, by John Roger Porter, Associate Professor, Department of Bacteriology, College of Medicine, State University of Iowa, 1073 pp., John Wiley & Sons, Inc., New York, $12.

This book is the outgrowth of lecture material which has been used for the past few years in a bacterial physiology course at the State University of Iowa. An attempt has been made to restrict the discussion in this work to the field of bacteriology, but mention is made from time to time of organisms which belong in other branches of science. Such references have been made in order to stress the fact that the physiological behavior of living matter is much the same in both the plant and the animal kingdoms. For example, we now know that the ability of plants and some bacteria to synthesize organic compounds from carbon dioxide is also a property of certain more fastidious forms of life. Likewise, some of the yeast enzymes responsible for alcoholic fermentation and those concerned with muscle glycolysis have much in common. Furthermore, the external supply of vitamins required by man is needed also by many insects, protozoa, and lower fungi. Since many other examples such as they can be cited, biologists are now beginning to appreciate the fact that certain vital processes can be studied more easily by using microorganisms, and that the information obtained often has direct application to the more complex conditions in higher forms of life. Contents: 1—Some Physico-chemical Properties of Bacteria and Their Environment. 2—The Growth and Death of Bacteria. 3—The Effects of Physical Agents on Bacteria. 4—The Effects of Chemical Agents on Bacteria. 5—The Chemical Composition of Microorganisms. 6—Bacterial Enzymes and Bacterial Respiration. 7—Bacterial Nutrition. 8—Metabolism of Carbon Compounds by Microorganisms. 9—Metabolism of Nitrogen Compounds by Microorganisms. 10—Microbial Fermentations.

Multiple-Beam Interferometry of Surfaces and Films, by S. Tolansky, Professor of Physics, Royal Holloway College, The University of London, 187 pp., Clarendon Press, Oxford, $6.

This is the first volume in a new series entitled Monographs On The Physics and Chemistry of Materials. The series is intended to summarize the recent results of academic or long-range research in materials and allied subjects, in a form that should be useful to physicists in Universities and in Government and industrial laboratories. This book describes both the technique and achievements of the application of multiple-beam interference of light to the study of the surface topography of solids and to the examination of the properties of thin films. Variations of surface height of but a few Angstrom units can be measured with the simplest of means—in fact, some crystal lattice spacings have been evaluated with visible light waves. The various techniques described have wide application in chemistry, crystallography, crystal physics, and metallurgy, and these are discussed in detail.

Modern Medical Discoveries, by Irmengarde Eberle, 183 pp., Thomas Y. Crowell Co., New York, $2.50

Recent medical discoveries are today saving thousands of lives, and preventing the spread of diseases that were once such a scourge. Penicillin, sulfa, DDT, plasma, atabrine—the discovery of each of them was an adventure, and the results a blessing to mankind. This book tells how each of these wonder drugs came to be. Penicillin was developed from an all but invisible speck of mold. The use of plasma is a tribute to international unity in science. How the knowledge of sulfa was pried loose from those who were suppressing it reads almost like a detective story. The brilliant scientists who made these discoveries worked in all parts of the world. Miss Eberle describes their lives, the conditions under which they worked. She tells of their discouragements and failures, and of their eventual triumphs.

YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Patent and Trade-Mark Consultant

FOUR recent decisions are quite interesting in what they seem to show. These are all under the old 1905 Act, but obviously the thinking today is in terms of the present 1946 Act.

The first and second decisions show that practically identical marks can be used concurrently on different goods. In other words, if the goods are different, the same mark can be used. This follows generally the "Sunkist" case I reported some time back. But the third and fourth show that where the goods are very similar, wide latitude will be given in considering whether the marks look and sound alike.

The decisions are numbered for reference.

1—Deodorant Diffuser Held Not Confusingly Similar to Air-Conditioners

In a very interesting case, Assistant Commissioner Daniels affirmed the Examiner's decision, dismissing an opposition by Eureka Williams Corp., against Dobkin. The marks involved were several registered marks, including "Air-o-matic" for Air-conditioning systems and units of various kinds and the published and opposed mark Aeromatic for a combined door check and deodorant diffuser.

Eureka argued that since the door check of pneumatic piston and plunger type was operated by movements of the door to pass air over a deodorant and thereafter send this air into a room, it was an air-conditioning device, even though the device also acted to check or slow down the door movements in the usual way.

This argument failed and it was held that the respective goods did not have the same descriptive properties.

In passing, it was also mentioned that it was not controlling that the air-conditioning systems and units are sold at higher prices and through different channels of trade than the combination door check and diffuser, but such an argument does add emphasis to the distinct difference in the goods.

2—"Rustaboo" Held to be Clear of "Tabu" for Different Goods

Consolidated Cosmetics were unsuccessful in opposing "Rustaboo" used in connection with a chemical for cleaning surfaces to be painted, for which registration was requested by Neilson Chemical Co. Consolidated relied on their registrations of "Tabu" and "Taboo" used on soaps, cosmetics and perfumes. A. C. Daniels affirmed the decision of the Examiner of Interferences, who dismissed the opposition on the ground that the goods must be considered to be so different in their purpose, use and channels of sales, that there was not even a remote liklihood that confusion might result for concurrent use of the mark upon such goods.

3—"Lavatum" Held Confusingly Similar to "Albatum" for Similar Goods

McKesson And Robbins successfully opposed Archer-Taylor Drug Store Co's., registration of "Lavatum" for greaseless base ointments relying on their registered trade-mark "Albatum" for ointments of a similar type. A. C. Daniels affirmed the Examiner's decision to refuse registration of "Lavatum" on the ground that the marks bear such a near resemblance, in both sound and appearance that this is likely to cause confusing in trade or deception of purchasers, when applied concurrently to the products involved.

4—"Oxydrene" Held Confusingly Similar to "Dexedrine" for Similar Goods

Smith, Kline and French Labs. were successful in their opposition to Keto Chemical Co's. attempt to register "Oxydrene" for Desoxyephedrine Hydrochloride sold in bulk for manufacturing purposes. They relied particularly on their registered trade-mark "Dexedrine," sold on medical prescription by druggists, in liquid or tablet form.

A. C. Daniels affirmed the Examiner's decision to sustain the opposition. It was held that the bulk form of chemical named has the same general descriptive properties as the tablets, which are a medicinal agent which affects the central nervous system in a similar way to Ephedrine.

The mere fact that one was sold in bulk to manufacturers and the other by prescription through druggists, does not affect the descriptive properties of the goods or the likelihood of confusion, since marketing methods are subject to change.

At Last We Have a Decision on Some Types of Marks which are Unregistraable under the 1946 Act

An appeal to the Commissioner of Patents was taken by Booth Bottling Company Inc., in view of the Examiner's refusal to register the mark "5 full glasses in every bottle." The goods involved were non-alcoholic beverages. This mark was refused and the rejection

affirmed by A. C. Daniels, based on the ground that this was not in fact a Trade-Mark at all.

It was held that it did not and could not identify the applicant's goods or distinguish them from others. This was considered as a phrase which merely indicated quality and not origin of the products. It was also stated that even extensive use and proof of distinctiveness would not help such a mark.

This decision is one we have been waiting for, just to see how far the Patent Office will go in allowing such slogans and equivalent phrases to be registered. On the face of the Act itself, it would appear that such phrases are registrable, but interpretation by such decisions will be necessary, before we can catalogue correctly this type of mark.

Act of 1946

The following Trade-Marks have been re-published under the terms of the above (Lanham Act). No opposition can be filed against them but they are all subject to cancellation proceedings.

HEAD UP—VI—H—430,279
Reg. June 10, 1947 to Mennen Co., Newark, N. J.
Republished by Registrant

LA FLEUR BIEN AIMEE—VI—ABCH—227,879
Reg. May 17, 1927 to Houbigant Inc., N. Y., N. Y.
Republished by Registrant

LAFOMA—VI—H—191,480
Reg. Nov. 11, 1924 to F. W. Fitch Co., Des Moines
Republished by Registrant

LE PARFUM IDEAL—VI—ABCH—221,886
Reg. Dec. 14, 1926 to Houbigant, Inc., N. Y., N. Y.
Republished by Registrant

LILAC TIME—VI—ABCH—382,427
Reg. Oct. 29, 1940 to Houbigant Inc., N. Y., N. Y.
Republished by Registrant

LIQUID FLOWERS—VI—B—411,218
Reg. Jan. 9, 1945 to Parfums Missenet Inc., N. Y., N. Y.
Republished by G. R. Parkinson, N. Y., N. Y.

LOV LAY—VI—H—292,353
Reg. Mar. 15, 1932 to F. W. Fitch Co. Des Moines, Iowa
Republished by Registrant

LUCKY MO-JO—VI—BR—298,216
Reg. Oct. 11, 1932 to M. G. Neumann dba Lucky Mo-Jo Pro. Co., Chicago, Ill.
Republished by Valmor Pro. Co., Chicago, Ill.

MARGO—VI—BC—143,326
Reg. May 31, 1921 to Elmo Inc., Phila. Pa.
Republished by Registrant

MARIMBA—VI—B—418,569
Reg. Jan. 1, 1946 to A. Jergens Co., Cinci., Ohio
Republished by Registrant

MARLIN—LV—I—403,890
Reg. Oct. 19, 1943 to Marlin Firearms Co., New Haven, Conn.
Republished by Registrant

MAY FLOWERS—VI—BCE—225,266
Reg. Mar. 15, 1927 to Reichman & Faust N. Y., N. Y.
Republished by Cheramy Inc., N. Y., N. Y.

MENNEN—VI—C—358,165 (with Des)
Reg. June 28, 1938 to Mennen Co., Newark, N. J.
Republished by Registrant

MENTHOLATUM—IV—I—246,955
Reg. Sept. 18, 1928 to Mentholatum Co., Wichita, Kans. & Buffalo, N. Y.
Republished by Registrant

MENTHOL-ICED—IV—I—253,177
Reg. Feb. 19, 1929 to Mennen Co., Newark, N. J.
Republished by Registrant

MIOSOTYS—VI—C—270,807
Reg. May 13, 1930 to Elmo Inc., Phila. Pa.
Republished by Registrant

MME. C. J. WALKER—VI—CHK—153,556
Reg. May 21, 1922 to Madam C. J. Walker Manf. Co., Indianapolis, Ind.
Republished by Registrant

MME C. J. WALKER—IV—A—159,572
Reg. Sept. 36, 1922 to MMe. C. J. Walker Manf. Co., Indianapolis, Ind.
Republished by Registrant

MON BOUDOIR—VI—AB—158,052
Reg. Aug. 22, 1922 to Parfumerie Houbigant, Paris, France
Republished by Houbigant Inc., N. Y.

MOON ROSE—IV—I—349,693
Reg. Aug. 31, 1937 to Record Supply Corp., Chi., Ill.
Republished by P. M. Cooter dba Cooter Co., Chicago, Ill.

MOTAN—VI—C—319,813
Reg. Dec. 4, 1934 to Elmo Inc., Phila., Pa.
Republished by Registrant

MURJE—VI—BC—143,327
Reg. May 31, 1921 to Elmo Inc., Phila., Pa.
Republished by Registrant

ODOR-O-NO—VI—D—96,159
Reg. Apr. 7, 1914 to A. D. Murphy Cinci., Ohio
Republished by Registrant of Stamford, Conn.

OLIVEEN—VI—CH—339,090
Reg. Sept. 22, 1938 to Lindsay Ripe Olive Co., Lindsay, Calif.
Republished by Registrant

PARFUM INCONNU—VI—AB—146,128
Reg. Aug. 30, 1921 to Parfumerie Houbigant, Paris, France
Republished by Houbigant, N. Y.

PARIS GIRL—VI—BC—276,028
Reg. Oct. 7, 1930 to M. G. Neuman dba Valmor Perfumer, Chi., Ill.
Republished by Valmor Pro. Co., Chi., Ill.

PLEIN ETE—VI—C—291,457
Reg. Feb. 9, 1932 to Houbigant Inc., N. Y.
Republished by Registrant

PLEXO—VI—C—80,911
Reg. Feb. 14, 1911 to General Drug Co., N. Y., N. Y.
Republished by Plexo Prep. Inc., N. Y., N. Y.

PLEXOLAN—VI—C—267,974
Reg. Mar. 4, 1930 to Plexo Prep. Inc., N. Y.
Republished by Registrant

POST OFFICE RED—VI—CE—432,880
Reg. Sept. 16, 1947 to Avon Products Inc., N. Y.
Republished by Registrant

PRESENCE—VI—C—309,266
Reg. Jan. 9, 1934 to Houbigant Inc., N. Y., N. Y.
Republished by Registrant

PRONTO—IV—M—351,041
Reg. Oct. 19, 1937 to A. M. Alexander Chi., Ill.
Republished by Registrant

Q. B. SKIN AID—VI—C—320,312
Reg. Dec. 25, 1934 to J. W. Quinn Drug Co. Inc., Greenwood, Miss.
Republished by Registrant

QUELQUES VIOLETTES—VI—B—141,389
Reg. Apr. 19, 1921 to Parfumerie Houbigant Paris, France.
Republished by Houbigant, Inc., N. Y., N. Y.

QUINS ANA—VI—DT—368,070
Reg. June 6, 1939 to Mennen Co., Newark, N. J.
Republished by Registrant

RA-LO—VI—BC—143,327
Reg. May 31, 1921 to Elmo, Inc., Phila., Pa.
Republished by Registrant

ROYAL FERN—IV—A—234,817
Reg. Nov. 8, 1927 to Houbigant, Inc., N. Y., N. Y.
Republished by Registrant

RUBICON—VI—CH—174,368
Reg. Oct. 16, 1923 to Hall, Thrallis & Co., Hymera, Ind.
Republished by L. H. Thrallis dba Hall, Thralls & Co. Hymera, Ind.

RUSALKA—VI—B—193,812
Reg. Jan. 6, 1925 to Otis Clapp & Son Inc., Boston, Mass.
Republished by Registrant

SANCHIA—VI—B—193,809
Reg. Jan. 6, 1925 to Otis Clapp & Son Inc., Boston, Mass.
Republished by Registrant

SENSATENE—VI—FST—372,193 (with Des.)
Reg. Oct. 24, 1939 to Dixie Lav. Inc., Martinsville, Va.
Republished by Registrant

SEPTISOL—IV—A—245,239
Reg. Aug. 7, 1928 to Vestal Chemical Co., St. Louis, Mo.
Republished by Registrant

TALIZIN—VI—C—193,807
Reg. Jan. 6, 1925 to Otis Clapp & Son Inc., Boston, Mass.
Republished by Registrant

TRANSLUCIDE—VI—BCH—380,428
Reg. Aug. 20, 1940 to Houbigant, Inc., N. Y., N. Y.
Republished by Registrant

TRANSPARENCE—VI—C—289,043
Reg. Nov. 17, 1931 to Houbigant Inc., N. Y., N. Y.
Republished by Registrant

TRYLON—VI—A—381,125
Reg. Sept. 10, 1940 to Oscar A. Barke dba Trylon Pro. Co., Chi., Ill.
Republished by Registrant

VANISORB—VI—M—415,684
Reg. Aug. 14, 1945 to T. C. Giamio dba Vanisorb Lav. Hoboken, N. J.
Republished by Registrant

VELVA—VI—ABCDHS—205,732
Reg. Nov. 17, 1925 to F. N. Lewis dba Elizabeth Arden N. Y., N. Y.
Republished by E. Arden Sales Corp., N. Y., N. Y.

WHITE MOIRE—IV—A—432,852
Reg. Sept. 16, 1947 to Avon Products Inc., N. Y., N. Y.
Republished by Registrant

ZIA—VI—B—399,205
Reg. Dec. 22, 1942 to J. H. Woodbury, Inc., Cinci. Ohio
Republished by Registrant

(Continued on page 242)

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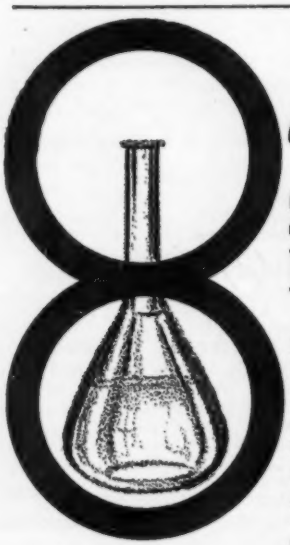

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(*Continued from page 172*)

forgotten fact that a capable retailer, who has won a reputation in his community and who has a clientele, can sell merchandise, create a consumer following for it, build it to substantial brand recognition, with or without manufacturer's national advertising if he wants to and thinks it worthwhile.

The retailer is apt to think it worthwhile if he is sold on the product, like the manufacturer and the way he does business, is given a fair amount of intelligent store sales cooperation and a fair sales monopoly or edge on competition.

There are many ways in which the retail franchise is exercised in the cosmetic business. The franchise may be severely restricted, without regard to growing volume in any store. Or it may be on the basis of declared expansion, only and not until, a store has passed a maximum annual sales volume which will avoid dilution of expanding national sales.

A franchise may be limited to a class of store, to one store to a city, a city section, a territory or to stores which can provide a certain minimum volume. It may be restricted, as in cosmetics, to a type of store which has generally been recognized by prestige manufacturers.

The retail franchise, together with the pattern of distribution, is the heart of selected selling.

The basic characteristic of the retail franchise is that the closer the franchise comes to complete monopoly within the retailers trading area, the more he is willing to lend all the selling forces of his store, providing of course he believes in the growth potential of the product. It should be added also, providing he believes in the manufacturer's good faith for an extended period of the franchise.

(4) Vertical and Horizontal:

There are a few fortunate manufacturers who can launch a new product with a million dollar advertising campaign. Not many can even meet the minimum of consumer advertising expenditures needed to attract national attention, that is $250,000, as set by a well-known advertising agency (Grey).

For most beginners who seek distribution, with the handicap of limited money for promotions, the choice is between a starting point and then early expansion on a vertical or horizontal plane. Many new and growing companies selling perfumes and cosmetics prefer horizontal expansion. This is because the department store offers so many advantages to a new and growing company, providing the product is acceptable to this type of store.

The newcomer can start with a few stores in major cities—let's say Boston, New York, Philadelphia, Detroit, Chicago, Los Angeles and San Francisco. There may be one or more stores to a city, more or fewer cities, or other cities, But within the limits of the capital he has for promotion, a few selected department stores provide the ideal opportunity for using the limited dollar in advertising and promotions with minimum waste.

Once a case history of retail success is established in any territory, expansion may be vertical, i.e., to other department stores, chains and independent drug stores in the territory or horizontal, i.e., to other cities and territories duplicating the initial operation.

Vertical operation is a series of operations in depth, starting with a case history of retail success as a focal point and proceeding to the maximum distribution required for the product before repeating the process in a new territory. Horizontal expansion is something like the layers of a cake. When completed, each band lies on top of the other.

There are of course an infinite number of variations and compromises. But the new and small manufacturer will find that a good many dollars and headaches can be saved if he knows approximately where he is going in distribution and why.

Except for the man who has too much money and who is in too much of a hurry, no method of building initial sales can approach in effectiveness the creation and use of the retail case history. This is proof not only of product acceptance, but of promotional know-how. Providing the case history is in a store other retailers respect and is of long enough duration to have any meaning, it speaks a language retailers know best.

For perfumes and those cosmetics tied in with fashion, glamour and prestige for most of the new gadgets and novelties, the department store reigns supreme for introduction and proof of sales appeal. Probably more perfume and cosmetics have had their start in Sak's Fifth Avenue than in any other retail store. Alice Mathew's flair for introducing new products with merit has made Mandel Brothers in Chicago another famous starting point.

But this does not mean that the department store has exclusive advantages for a starting point—a case history success that provides a hub for expanding distribution. Many independent druggists, perhaps as many as 1000, have shown an alert competence that has made them recognized leaders in perfume and cosmetic selling in their community. Some chains have an organized technique that provides the right kind of product, backed by sufficient capital, an opportunity to find a starting point and to expand through the chains selected stores. Although few wholesale druggists are equipped to function in this way, their close contact with stores of a well defined area provide opportunities for close cooperative selling for a product destined for mass distribution.

Each of these distributive retail outlets, variety stores, the independent druggist, chain drug stores, department and specialty stores, and as an intermediary, the wholesale druggist, require a highly specialized selling technique that is the result of their characteristic method of operation. It is as a result of this different and, in some ways, incompatible technique in selling

(*Continued on page 252*)

Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

Fats and Fatty Oils

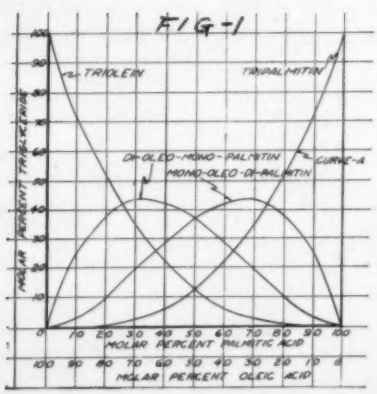
Proctor and Gamble has come up with nine patents (U. S. 2,442,531 to 2,442,539), all dealing with rearrangements in glycerides. Apparently, the newly-patented processes result in what are essentially novel products possessing properties which fit them for special uses, according to the patents. A good idea of the inventions underlying this series of patents can be obtained from a detailed study of the first patent in the line, U. S. 2,442,531.

This patent, issued like the others in the name of Eddy W. Eckey, points out that fats are glycerides of rather non-uniform composition resulting from the fact that their fatty acid components may and in nature always do differ. Thus, if the glyceride of palmitic acid and oleic acid is taken as an example it will be seen that there are six possible combinations:

Tripalmitin
Monooleo dipalmitin (symmetrical)
Monooleo dipalmitin (unsymmetrical)
Dioleo monopalmitin (symmetrical)
Dioleo monopalmitin (unsymmetrical)
Triolein.

If palmitic and oleic acids are first mixed one mole to two and the mixture is reacted with glycerin to form triglycerides all of the above triglycerides will be formed and will exist in the resulting triglyceride mixture, according to the patent, and their respective proportions in the mixture can be calculated in accordance with the mathematical law of probabilities as shown in Fig. 1 below.

FIG-1



According to the patent, when a natural fat or mixture of natural fats is heated to high temperature substantially above the melting point in the presence of a suitable catalyst, an interchange or rearrangement of fatty acid radicals occurs. Since this interchange of radicals is reversible, the constitution of the fat molecules after continuance of such a reaction at high temperature for some time is, as already noted, in accordance with the operation of the law of probabilities, and the final result can be predicted from a knowledge of the nature of the fatty acids constituting the fat or mixture of fats.

Since the calculations are said to represent what occurs in actual fact when a triglyceride is synthesized from glycerin and a mixture of saturated and unsaturated fatty acids, the percentage of trisaturated glyceride that is contained in the product of a molecular rearrangement conducted according to known liquid phase processes may be determined by reference to curve A.

In certain cases there is utility in this type of rearrangement but obviously, the patent points out, there are limitations in the change that can be effected in the original fat, depending on how much the constitution of the natural fat differs from the constitution dictated by law of probabilities.

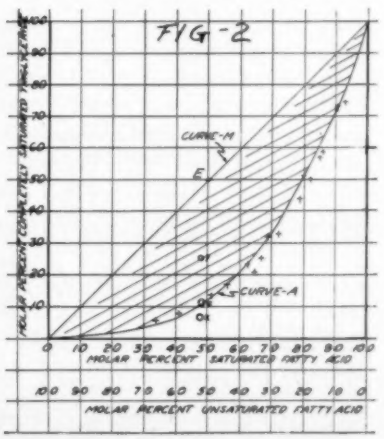
In the words of the patent:

"The present invention utilizes the knowledge that fatty acid radicals in triglyceride fats will rearrange under the proper conditions of treatment, but seeks to direct and control that rearrangement so that a result not heretofore obtained is realized. I have discovered that the molecular rearrangement reaction can be made to proceed at a practical rate at much lower temperatures than heretofore proposed, and that if the fat is admixed with a suitable catalyst and rearrangement is permitted to take place at a termperature below that at which the liquid phase is saturated with respect to relatively high melting triglyceride fats, such high melting triglycerides formed in the course of the interchange of fatty acid radicals will crystallize from the liquid fat and take no further part in the interchange process. Thus, as molecules having low solubility in the liquid fat phase are formed and crystallize out of solution, further rearrangement of such molecules (such as would occur in the conventional single phase reaction) is prevented; consequently the percentage of higher melting molecules present in the whole fat mixture tends to increase as long as crystallization continues. Crystallization of such relatively insoluble solid triglycerides can continue as long as the solubility thereof in the liquid fat phase at the temperature of reaction is exceeded by the amount newly formed in the reaction. Also, since this solubility decreases with decrease in temperature, the maximum amount of solid fat that can crystallize will be greater at the lower temperatures.

"Completely saturated triglycerides, such as tristearin and tripalmitin, are least soluble in the liquid constituents, and therefore normal practice of the present invention on the average fat will result to a large extent in the crystallization of completely saturated triglycerides and, accordingly, in the conversion of a large proportion of mixed saturated-unsaturated triglycerides into completely saturated triglycerides and completely unsaturated triglycerides.

"In accordance with the present invention, therefore, it is possible by selection of a suitable low temperature for the reaction to control the extent of formation and separation of solid triglycerides having limited solubility at

FIG-2



the selected temperature and thus to direct the result away from the result that is obtained when the reaction is allowed to proceed to completion wholly in the liquid phase in accordance with prior art processes. Another factor controlling the extent of the rearrangement is the period of time during which the reaction is allowed to proceed.

"Within limits, therefore, the more the temperature is lowered below the highest temperature at which crystallization can occur and the longer the reaction is permitted to proceed toward completion, the greater will be the directive influence of the simultaneous crystallization upon the result of the rearrangement. Thus by the selection of appropriate conditions it is possible to carry the rearrangement of fats containing mixed saturated-unsaturated triglycerides substantially to the theoretical limit of completion, at which all of the saturated fatty acid radicals in the fat have been assembled into fully saturated triglycerides, and correspondingly all of the unsaturated fatty acids have been assembled into fully unsaturated triglycerides. The limit of fully saturated triglyceride is represented by curve M in Fig. 2. A fat, for example, that contains in combined form as mixed saturated-unsaturated triglycerides 50 molar per cent saturated fatty acid and 50 molar per cent unsaturated fatty acid would approach the composition containing an amount of fully saturated triglyceride represented by point E on curve M as the rearrangement into fully saturated and fully unsaturated triglycerides approached completion in accordance with my invention.

"On the other hand, the corresponding limit of fully saturated triglyceride content for products obtained by applying known processes of glyceride rearrangement (i.e. rearrangement in the absence of a solid fat phase) is represented by curve A, and such rearrangement of the triglyceride fat just mentioned would produce no further change after the composition represented by the point on curve A directly under point E was reached, i.e. 12½ molar per cent fully saturated triglyceride with corresponding proportions of other triglycerides as represented in Fig. 1.

"Thus triglyceride compositions having completely saturated triglyceride contents falling within the range represented by the crosshatched area between curves A and M in Fig. 2 are for the first time made available to the art by a molecular rearrangement process."

Examples involving the rearrangement of palm oil, cocoa butter, coconut oil, cottonseed oil, hydrogenated cotton seed oil, menhaden oil and kokum butter are given. Example 1 is reproduced here:

Example 1.—Palm Oil—Rearrangement at 100°F.

To a suitable vessel equipped with a mechanical agitator and provided with a thermometer, a reflux condenser, and means for blanketing the contents of the vessel with an inert gas such as nitrogen, is added refined, filtered and dried palm oil in molten condition. The oil is brought to 100°F. and while the oil is being stirred vigorously with the mechanical agitator there is added in the proportion of 0.6 part by weight for every 100 parts by weight of oil a catalyst solution consisting of about 26 per cent sodium methoxide and 74 per cent methanol which becomes finely dispersed throughout the oil. The agitation of the mixture at 100°F. is continued for about 6 hours. During this period of agitation glycerides insoluble in the reaction mass and consisting predominantly of completely saturated glycerides precipitate, and at the end of the agitation period the reaction mixture is in the form of a mushy mass. After this stage is reached, mechanical agitation may be discontinued and the mixture permitted to stand for about 18 hours at 100°F. At the end of this time the mass will be so solid that it will not pour. The reaction product is acidulated with dilute phosphoric acid to decompose the catalyst, then melted, washed with water and dried.

In an examination of the product and a comparison thereof with the original oil and with the product of rearrangement in the absence of a solid fat phase, the data of the following table were obtained. The greater increase in melting point and in the formation of substantially completely saturated triglycerides effected by the instant process of rearrangement is evident. The substantially completely saturated triglyceride results shown in the table have also been plotted in Fig. 2 as points X, Y, and Z on the ordinate representing a triglyceride having 48 per cent combined saturated fatty acid to show that the assertions previously made regarding the formation of completely saturated triglycerides are confirmed in practice.

	Original Palm Oil	Product of this Example 1	Product of single phase rearrangement. Three days at 120°F. with about 0.6% of a 20% solution of sodium methoxide in methyl alcohol.
Iodine Value	52.7		
Capillary M.P., °F.	103.7	130	116.6
Per cent combined saturated fatty acid	48		
Stearine obtained by crystallisation from petro-petroleum ether:			
Yield, Wt. per cent of sample	6.3 (X)	25.7 (Y)	11.2 (Z)
Iodine Value	7.2	1.7	3.4
Capillary M.P., °F.	142	142	135

The practical value of the rearrangement process is said to be very great. It is said to make possible the application of many specific fats to fields of uses which were not open to such fats before. It permits the production of materials having little or no saturated fatty acids in the triglyceride molecules or conversely the production of materials having little or no unsaturated fatty acids in the triglyceride molecules. Further, a combination of triglycerides which have plasticity over certain ranges of temperatures where such plasticity is desirable such as in the cooking fat industry are made possible, as in the case of the palm oil rearrangement. Confectioner's hard butter can be made by the rearrangement of coconut oil, palm kernel oil and similar tropical nut oils. Improved drying oils from fish oil and soybean oil are also said to result from the process.

Other Patents

U. S. 2,450,866—**Dr. Salsbury's Labs.—Poultry Treatment Composition. Contains 3-nitro-4-hydroxy phenyl arsonic acid.**

U. S. 2,451,310—**Winthrop-Stearns—Indol derivatives. Alkyl esters of alpha - acylamino, alpha - cyano, beta-(3 indole)-propionic acid.**

U. S. 2,451,149—**Nipa Laboratories, Limited-Mono-p-chlorophenyl-ether of ethylene glycol and to stabilize against micro-biological decomposition.**

U. S. 2,451,427 to *2,451,429*—**American Cyanamid Company—Biotin Intermediates.**

U. S. 2,451,579—**J. R. Geigy—4-Halogenomethyl-1:8-Naphthsultones**

U. S. 2,451,645—**Monsanto Chemical Co.—Fungicidal and Bactericidal compositions containing 1-(4'-isopropylbenzyl)-piperazine.**

U. S. 2,451,772—**Temple University—Solubilization of Rutin with Methyl Glucamine.**

(To be continued)

Note: Copies of U. S. patents may be obtained for 25 cents each from the Commissioner of Patents, Washington 25, D. C.

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Progress in Hair Coloring

(Continued from page 163)

properties and performance with change of molecular size quickly becomes apparent. As molecular size increases, solubility, speed of diffusion, and usefulness as a coloring agent all rapidly approach zero. It is interesting that in the most successful dyeing system, ammonia, water, hydroxyl ion, hydrogen peroxide, p-phenylenediamine, and resorcinol, all are small molecules. The first four can certainly penetrate rapidly into the hair shaft. They eventually assist one another and the diffusion front can be seen as a visible sharp boundary advancing from the cuticle toward the medulla. This type of action is illustrated in Figures 7-9, in which the diffusion of a 3 per cent thioglycollate solution into a hair shaft is shown. It is not surprising, therefore, when phenylenediamine and resorcinol accompanying this diffusion, react with all four of the other components, condense with themselves, and remain attached to or adsorbed by "anionic points" either originally present in the hair or formed therein through oxidation by hydrogen peroxide.

The effect can be enhanced by previously mordanting hair with suitable metal-ion-containing solutions. Metals similarly enter keratin as cations, attach them-

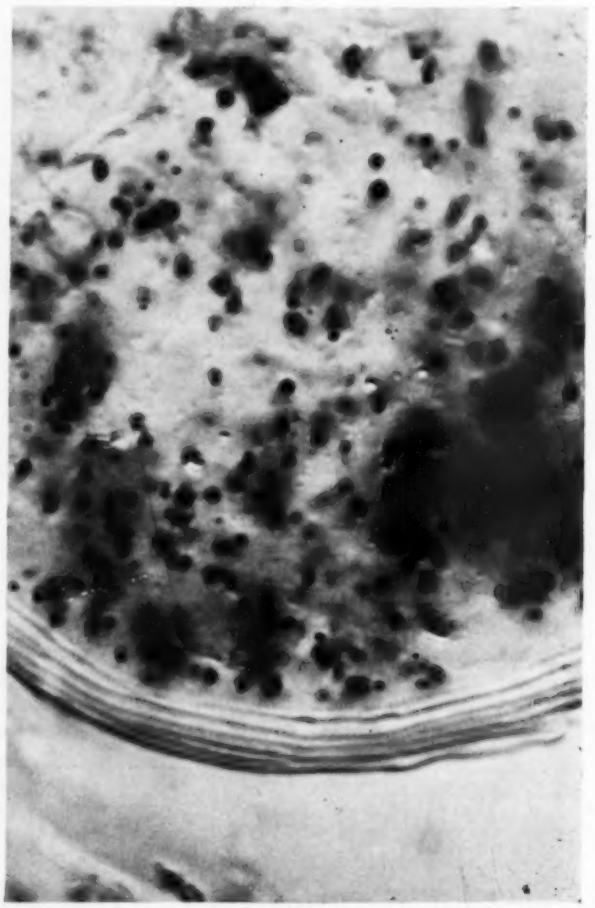

FIGURE 11
Detail of Figure 10, Magnification 3600X

selves at anionic points (and also in complexes similar to sequestered ions as in nullapons) and can and do become similarly associated with amines such as phenylenediamine, its oxidation and condensation products. They can intensify the color, increase the fastness to light, and reduce the tendency to leach out by reducing the solubility of the color complex and increasing the forces that bind it to the keratin, especially at anionic points within the space lattice.

Chief Chemicals Used in Hair Dyeing

p-Phenylenediamine discovered by A. W. Hofmann in 1863[3], was first used to color keratin by Monnet[1] in 1883 and Ernst Erdmann in 1888[2], and has since become the most important chemical for the dyeing of hair and fur.

It has many virtues as a component of a hair dye:

1. The compound is basic, its strength is of the order of the basicity of ammonia.
2. It and most of its salts are soluble in water and alcohol.
3. It is easily oxidized to the unsaturated phenylenediamine, which can readily polymerize or can condense with secondary couplers to form colored bodies.

(Continued on page 230)

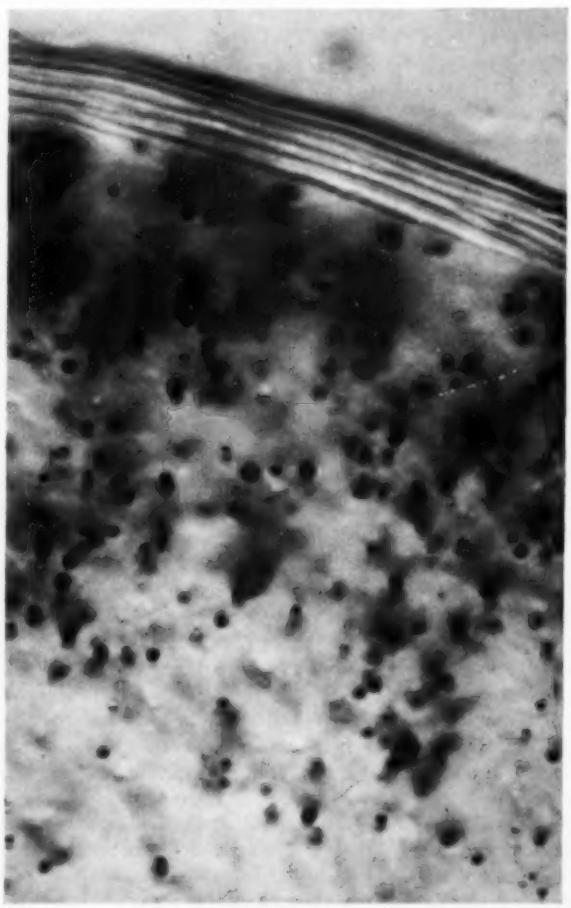

FIGURE 12
Cross-Section of Hair Showing Overlapping Scales of Cuticle and Pigment Granules in Cortex

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Compounder's Corner

Cosmetic Creams

A comprehensive review of various types of cosmetic creams, with illustrative formulas, is presented by F. Winter in *Soap, Perfumery and Cosmetics* (21:897, 1948). Of particular interest to the cosmetic chemist are emulsified bases which this authority has given the name, "Stearatines." These are prefabricated bases for the preparation of a wide variety of face creams, beauty milk and other products. They consist of dry (anhydrous) fatty stearate complexes, obtained by the careful and complete drying of preformed cream emulsions. These dry stearantines can give excellent service as emulsifying agents for petroleum jelly-containing creams, on condition that they have been so prepared as to be perfectly anhydrous.

An ammoniacal stearatine is made from:

Stearic acid	15.0
Liquid paraffin	1.5
Cocoa butter	3.0
Borax	0.7
Water	10.0
Ammonia (0.97)	6.0

A formula for a carborated Stearatine calls for:

Stearic acid	15.0
Liquid paraffin	1.5
Petroleum jelly, long-fibre	1.5
Paraffin wax	1.5
Borax	0.7
Potassium carbonate	1.5
Water	10.0

These stearatines are prepared in similar fashion to ordinary stearate creams. When emulsification is complete, the cream is carefully and thoroughly dried by evaporation of the water content. The residue thus obtained represents the finished stearatine. The latter is a white fatty mass, dry and somewhat crumbly. It is soluble in fats and oils and renders them hydrophilic. With 90 grams of boiling water, 20 grams of stearatine gives an attractive cream, after a very brief period of mixing in the warm. With 500 grams of boiling water a stable milk is obtained.

Dry stearatines are very useful in the preparation of petroleum jelly creams, although similar complexes hydrated (i.e. the stearatine before it has been dried) are unsuitable because of their lack of solubility in petroleum hydrocarbons. Illustrative of such utility is a cream made from:

Liquid paraffin	70
Stearatine	30
Water	20

Warm the stearatine with the liquid paraffin on a water bath until dissolved, then leave until cold. The water is then added with stirring; the batch is brought to the boiling point, the stirring being continued. At this point the heat is shut off and the batch allowed to cool, slow stirring continuing until the cream reaches room temperature. A white, brilliant and stable cream results.

Formulas for making cold creams, cleansing creams, liquid creams and other types of creams are also given by Winter. Quite interesting is a honey-wax cream made from:

Yellow beeswax	100
Honey	60
Water	500
Ammonia (0.97)	40

Mix the honey with the water, melt with the beeswax, add the ammonia while stirring and bring to the boil for 15 minutes. Shut off the heat and cool; continuing the stirring.

Identifying Crude Drugs

According to an item in Science News Letter (54:121, 1948), C. R. Chase, Jr. has developed a speedy and efficient method for identifying botanical drugs by their fluorescent glow under ultraviolet light using the knowledge gained by earlier researches who observed that some drugs give off a characteristic fluorescent glow when exposed to ultraviolet light. Chase tested 151 crude drugs but could get only about a third of them to fluoresce under the rays. He next discovered that after treating a drug with one or more of three different solutions the drug would give off a characteristic glow of color that would easily identify it.

This may prove to be a very important advance, for traditional methods call for tedious studies of cell structure under the microscope or for time-consuming microchemical tests. Fast and reliable methods of detection are important to pharmaceutical firms, research workers and law enforcement officials, for such drugs reach the United States from all over the world.

This new system for identifying crude drugs won Chase the Kilmer Prize and a presentation of an inscribed gold key by the American Pharmaceutical Association. Chase is continuing his experiments to perfect his system to include identification of drugs which show similar color changes or do not fluoresce at all after application of the three standard methods.

Cold Permanent Hair Waving

In a discussion of cold waving and other industrial uses of thioglycollic acid, A. B. Bell (*Manuf. Chem. & Manuf. Perf.* 19:295, 1948) notes that five years ago the cold permanent hair waving process was in the experimental stage. Only when thioglycollic acid of suitable purity became available was this process able to compete successfully with established heat systems of permanent waving. Today in America the cold wave process, which relies exclusively upon thioglycollic acid, has captured a very large section of all the permanent wave business.

The advantages claimed for the cold permanent-waving process, as compared with earlier established processes depending upon the use of heat, have been summarized as: 1. Greater comfort for the patron; less weight on the head; no pulling of the hair; comfort to move about. 2. Wave is very close to the scalp (no protective pads and clamps required) and 3. The texture of the hair is usually left soft and natural. The process is performed in two stages: *Stage 1:* Hair is treated with a "waving" solution containing a salt of thioglycollic acid, until the required degree of relaxation is obtained. *Stage 2:* The action of the "waving" solution is "stopped" by treating the hair with a "neutralizing" solution.

The process cannot produce a "permanent set" unless *both* these stages are performed effectively. Therefore, it follows that a cold-waving system can function properly only when both the waving solution and the neutralizing solution are correctly formulated and compounded.

Typical formulae for both waving and neutralizing solutions are available in trade and patent literature, for example:

I

Thioglycollic acid	**10 Gm.**
Sodium hydroxide	**7 Gm.**
Hydroxylamine sulphate	**10 Gm.**
Water	**100 cc.**

(U. S. Pat. 2350178)

II

Sodium or ammonium thioglycollate	**4-8 parts**
Wetting agent	**0-1 parts**
Water, to make	**100 parts**

In addition to the active waving agent the solution may contain a wetting agent, a buffer, and an anti-oxidant. The *p*H of the waving solution, which largely determines the velocity of the waving effect, is of first importance and must be accurately controlled. Indeed, scientific control of all aspects of manufacture is indispensable.

The neutralizing solution used in the cold-wave process usually consists of hydrogen peroxide diluted to a convenient concentration with water. Alternatively, a solution of potassium bromate may be employed, but this material is understood to be unavailable for cosmetic use at present.

Powder Make-Up Preparations

The use of vanishing cream and face powder alone as a means of making up is now being seriously challenged by a wide variety of popularly styled "make-up" preparations. The reasons are not hard to find for these recent developments enable women to hide small skin blemishes and to retain a day-long matt finish without recourse to frequent re-powdering. In discussing these make-up preparations, G. Kempson-Jones (Manuf. Chem. & Manuf. Perf. 19:542, 1948) briefly considers powder cake, which is applied with a dry puff, and cake make-up which is applied with a wet sponge. More detail is given concerning liquifying make-up creams, which are applied with the fingertips. This type of product consists essentially of a suspension of powders in a non-aqueous gel. Such a product may contain between 30 and 50 per cent of a powder base, incorporated into the once popular liquefying cleansing cream. The addition of powder with a high coverage produces a preparation with excellent make-up qualities.

The principle of the liquefying cream is the production of a gel which readily breaks down under pressure. Such a gel may be prepared by the admixture of carnauba wax with a liquid ester such as isopropyl myristate. Refinements of this simple formula help to minimize the tendency of this type of gel to sweat in warm atmospheres. Additions of 1-2 per cent of cetyl alcohol or lanolin are useful in this respect. To manufacture this preparation the colored powder base is prepared in the usual way (omitting metallic stearates). This powder is then milled with a sufficient quantity of the oil on a triple roll mill or through a colloid mill. This smooth suspension of powder in oil is added to the remainder of the base, previously melted, and the mass gently heated until a smooth homogeneous product results. Cool, and perfume at about 50°C. The product is then ready for filling.

In reporting on make-up and powder creams, Kempson-Jones states that these products are basically suspensions of powders in oil-in-water emulsion type cream bases. The early representatives of this class were simply pigmented vanishing creams and many such preparations still remain popular. The more modern versions usually appear as make-up creams, and these products utilize raw materials such as glycol and glyceryl esters, absorption bases, polyglycols, sulphonated oils, tetrahydrofurfuryl alcohol and its esters, and, of course, humectants such as glycerine, propylene glycol and sorbitol. The creams may contain up to 25 per cent of powder base, and because of this comparatively low powder content, covering ingredients such as zinc oxide and titanium dioxide are added in higher quantities than usual. This enables the final cream to possess a sufficiently marked effect on application. The powder should be milled with the whole or a portion of the mixed aqueous liquid ingredients, and then added to any remaining water miscible materials. This smooth powder suspension is then added to the previously melted oils and waxes, and heating continued until a smooth homogeneous cream results. Cool, and perfume at about 50°C. The resulting products are applied to the skin with the fingertips.

Superior Coal Tar Ointments

Coal tar has long been used in the treatment of dermatologic conditions, particularly eczema and psoriasis. Some dermatologists have expressed the belief that the mode of compounding the coal tar determines its therapeutic effectiveness and others that the source of the coal tar or the temperature at which it was made is more important than the manner of compounding. But no one has determined experimentally, in the manner in which we have carried out this investigation, whether the low or the high temperature coal tars should be used. To correct this condition J. G. Downing and C. W. Bauer (*Arch. Dermat. & Syphil.* 57:985, 1948) undertook a series of investigations which included more than 600 subjects studied over a three-year period. In these investigations they prepared an ointment that had shown considerable promise in the treatment of eczema and psoriasis. The ointment was manufactured in large quantities from eight different coal tars. Five of the coal tars used were high temperature and three were low temperature types. Each sample of tar was used in turn in the following formula:

Cornstarch, U.S.P.	**25 Gm.**
Zinc oxide, U.S.P.	**15 Gm.**
Solution of coal tar made according to the National Formulary and representing 2.66 Gm. of coal tar	**13.3 cc.**
Distilled water, U.S.P.	**6.4 cc.**
Wool fat, U.S.P.	**6.25 Gm.**
White petrolatum, U.S.P.	**32.50 Gm.**
Paraffin oil, U.S.P.	**6.25 Gm.**

This ointment base is not the water-soluble base so frequently employed. The ointment prepared by the formula given is a smooth non-greasy ointment, grayish rather than the dirty black so frequently seen. It is easily removed, and yet, when applied even in small amounts, as on the scalp, it forms a film that adheres well and lends itself successfully to treatment with ultraviolet rays. High temperature tars were observed to be the most dependable tars and they were effective against the majority of the cutaneous diseases treated.

In concluding, Downing and Bauer stress that tar is a useful drug in dermatologic conditions, but it must be chosen with care and used in subacute and chronic conditions. It should never be used in the acute stage of dermatitis due to an external irritant or a constitutional cutaneous disease, such as psoriasis. When indicated, it is merely an adjunct to other treatment, both local and general.

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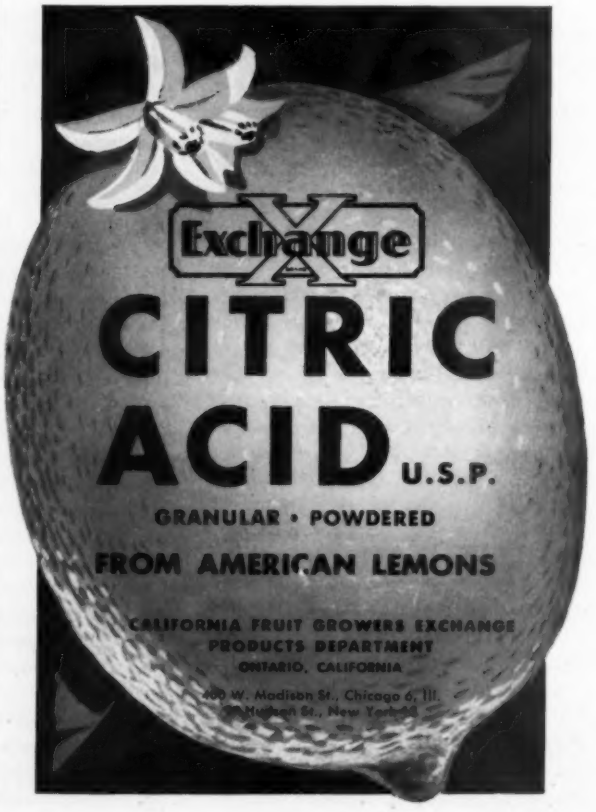

Advancing Therapy

Dicumarol in Congestive Heart Failure

Among the more serious threats to the life of the decompensated cardiac patient are thrombosis and embolism, and some means of combating these phenomena are a very pressing need in cardiovascular therapeutics. Recent work with anti-coagulant agents in postoperative patients, in cases of myocardial infarction and in cases of thrombophlebitis suggests that the use of dicumarol offers a safe and effective method of preventing such accidents. Further evidence along these lines is offered in the observations made by J. H. Wishart and C. B. Chapman (*New England J. Med.* 239:701, 1948). In their investigations 61 patients with definite congestive heart failure were treated with dicumarol in an effort to decrease the incidence of embolic phenomena. Previously published reports indicate that in a group of cardiac patients comparable to this series of patients one may expect embolic phenomena in the form of infarcts of the lungs in at least 22 per cent. In this series, the incidence of such lesions, during the period when dicumarol therapy was effective, was 6.5 per cent. There were no deaths attributable with certainty to massive pulmonary embolism, and only 1 death that might conceivably have been due to such an accident. On the basis of these results, it is probable that dicumarol therapy gives protection from thrombosis and embolism to the cardiac patient when he needs it most: when he is in congestive failure. Further evaluation of the method is under way.

Studies on Aureomycin

The *Journal of the American Medical Association* for October 9, 1948 carries two articles on aureomycin, a new antibiotic. The first of these reports, by L. T. Wright and his associates, indicates that this substance may have virucidal properties. Obtained from a streptomyces, aereomycine was used successfully by these workers in the treatment of 25 cases of lymphogranuloma venereum. It is felt that the results obtained with this drug in three types of the disease are such as to warrant further extensive trial.

The second paper, by A. E. Braley and M. Sanders, indicates the potentialities of aureomycin in ocular infections. They observed that aureomycin borate in 0.5 to 1 per cent solution is non-irritating to the inflamed conjunctiva and only slightly irritating to the noninflamed conjunctiva. Aureomycin borate is effective in 0.5 per cent concentration against staphylococci, pneumococci, influenza and inclusion conjunctivitis. The antibiotic appears to be effective in cases of Mooren's ulcer and a typical Mooren's ulcer of unknown cause. Aureomycin has some effect in epidemic keratoconjunctivitis, provided that treatment is started before the fourth day of the disease.

Frequency of Skin Diseases

In a report at the St. Louis meeting of the American Medical Association (through Science News Letter 54:374, 1948, E. C. Fox has listed the ten most frequent skin diseases: The ratings being based on the records of more than a million cases. He stated that ringworm, the fungus infection of the scalp and body, is probably the most common skin disease today. Eczema and acne also rate high on his list of the most frequent skin diseases. The other seven on the list are: 1. seborrhea, a scaly skin disease caused by excessive discharge from certain skin glands; 2. contact dermatitis, caused by irritation of the skin from various chemicals or animal or plant life; 3. impetigo, the superficial infection caused by streptococcus or staphylococcus germs; 4. scabies, commonly known as the itch; 5. nettle rash, or hives; 6. psoriasis, a chronic inflammatory skin disease characterized by patches covered with white scales; 7. pityriasis rosea, an inflammatory disease marked by reddish spots and ring-shaped patches upon the body.

Testosterone for Mental Depressions

Sex hormones and related substances have been used in the treatment of depressions for a number of years. Although the use of estrogenic substances of various types has yielded disappointing results in deeply depressed women, the injection of testosterone has been known for a decade or more to cause remission in male patients with depressions, provided large doses are used. As noted by M. D. Altschule and K. J. Tillotson (*New England J. Med.* 239:-1036, 1948) the rationale for the use of testosterone in the past has been that of replacement therapy in men past middle life. However, the fact that small doses are ineffective should have suggested the inadequacy of this concept.

In their study of 31 patients after relapse following improvement with shock therapy received the drug for three weeks; both required five weeks of shock therapy for temporary relief. They found that the effect of testosterone is largely or entirely on the affective disorder; paranoid or other serious disturbances in thinking were not changed, and neurotic manifestations were influenced but little. The disappearance of depression, confusion and retardation, however, was definite.

In summarizing their observations, Altschule and Tillotson state that the hormone acts apparently not as a specific sex hormone but as a substance with strong anabolic effects. In some patients it can be shown that the effects of electroshock and of testosterone are interchangeable, a phenomenon that suggests that the beneficial effects of convulsant therapy are the results of increased production of some steroid hormones. It is not unlikely that the favorable effects of electroshock therapy are reparative and not destructive.

Improved Oral Therapy of Hay Fever

Oral treatment of hay fever with pollen extracts has been employed since 1922. Satisfactory clinical results have been reported by several investigators. However, large doses of raw pollens have caused gastrointestinal irritation in sensitive patients. In such cases the dose that can be tolerated is likely to be

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below the effective level. According H. M. Feinblatt and E. A. Furguson, Jr. (New York State J. Med. 48:2720, 1948) this difficulty has now been overcome. For high dosage, a process of hydrolysis has effectively changed pollen so that in a series of 250 sensitive patients doses as high as 150 mg. (150,000 micrograms) have not produced symptoms of gastrointestinal upset in any case.

They report that in their controlled series of hay fever patients treated orally with hydrolyzed antigens, therapeutic results compared favorably with those following the use of injectable antigens in the same cases. Their findings in these cases have been summarized as follows: 1. An index of benefit of 78 per cent was found for rhinitis during oral antigen therapy and 44 per cent for injectable antigen therapy; 78 per cent for lacrimation during oral antigen therapy and 60 per cent for injectable antigen therapy; 73 per cent for skin itch with oral antigen therapy and 71 per cent with injectable antigen therapy, and 86 per cent for sneezing with oral antigen therapy and 40 per cent with injectable antigen therapy. 2. Percentage decrease in days lost from work was 78 per cent with oral antigen therapy and 25 per cent with injectable antigen therapy. 3. There was no instance of gastrointestinal irritation with oral antigen therapy.

Streptomycin in Gonorrhea

In the *British Medical Journal* (2:1015, 1948), R. R. Willcox reports that seven cases of gonorrhea (six males and one female), of which six were uncomplicated and one was complicated by Cowperitis, have been treated with single intramuscular injections of 0.2-0.6 Gm. of streptomycin in an aqueous medium. In all cases the initial response was at least as dramatic as treatment with penicillin in watery or oil-wax media. One patient, given 0.6 Gm., apparently relapsed after three days, but was successfully re-treated with the same dose of the drug. Another, complicated by Cowperitis, received only 0.2 Gm., and after a satisfactory initial response relapsed two days later with abscess formation in the gland and was then treated successfully with penicillin. One patient with dark-field positive primary syphilis was given a single intramuscular injection of 0.6 Gm. of streptomycin, and twenty-four hours later *T. pallidum* was still recoverable without difficulty from the dark-field. Apart from possible mild cerebral effects in one case, and mild pain at the site of injection in another, no toxic effects were recorded.

It is concluded that streptomycin will be of the greatest value in venereology for all cases of gonorrhea in which syphilis is more than usually suspect. As it appears that its use may not mask an incubating syphilitic infection, it is probable that only a three-months post-treatment period of surveillance to exclude syphilis will prove necessary for gonorrhea treated with streptomycin, as compared with the six months usual after treatment with penicillin.

Sodium Gentisate for Rheumatism

The anti-rheumatic effect of salicylate medication is believed by K. Meyer and C. Regan (*Science* 108:281, 1948) to be due to gentisic acid, the biologic oxidation product of salicylate. Sodium gentisate appears to have the same anti-rheumatic effect as salicylate without some of the disadvantages. Five patients with acute rheumatic fever and seven with rheumatoid arthritis were relieved of pain and swelling when given gentisate. Fever subsided and the erythrocyte sedimentation rate returned to normal. No untoward effects have been observed with doses of as much as 10 Gm. per day, although one patient receiving 8 Gm. per day had epigastric distress which disappeared upon withdrawal of the gentisate.

Intestinal Extract in Colitis Therapy

For several years B. Haskell and M. H. F. Friedman (*Am. J. Surgery* 76:709, 1948) have considered the possibility that non-specific ulcerative colitis is due to a deficiency of an intrinsic protective factor which is present normally in the bowel mucosa. This view would bring into accord a mass of apparently conflicting evidence. To test this theory oral treatment with extracts of hog's small intestinal mucosa was undertaken in seventy-one patients. A total of twenty-seven of these patients have been followed for one year or longer. Symptomatic and sigmoidoscopic evidences of improvement were shown in twenty-four cases. After remission of symptoms, withdrawal of the intestinal extract or substitution of a placebo resulted in relapse, with remission occurring again upon resumption of treatment. It is probable that sustained improvement can be maintained only by continued administration of the extract.

Uses of Radioactive Iodine

According to E. R. Miller, M. H. Soley and M. E. Dailey (Am. J. Roentgenol. & Rad. Ther. 60:45, 1948), radioactive iodine (I^{131}) is capable of spontaneously disintegrating and emitting radiation, either beta particles or beta particles and gamma rays. It is useful in therapy since this radiation may destroy the cells which absorb the iodine, and useful in tracer work since it allows one to follow the fate and metabolism of the iodine by observing the radiations emitted from it. There is no difference in the metabolism of radioactive and nonradioactive iodine. However, there are eleven different radioactive isotopes of iodine which differ enough in radiation action so that they might well be considered as different substances. Radioiodine is useful in the treatment of Graves' disease in which the thyroid is not saturated with iodine. It is not useful in the therapy of Graves' disease in which the thyroid is saturated with iodine, nor is it useful in the treatment of thyroiditis, nontoxic goiter or involutionary nodules in the thyroid. It is occasionally useful in therapy of carcinoma. The studies described here were made in order to determine the uptake of radioiodine in microcuries in the human thyroid in situ after oral administration of I^{131}. From this an estimate of the energy dissipated within the thyroid can be made. The iodine solution is put into about 50 cc. of water, and the patient drinks the entire solution. The iodine is administered in the evening and measurements are made on the patients during the following two days during the daytime. Follow-up measurements are made at one and two week intervals. The patients are re-evaluated clinically and with laboratory tests at the end of a month to determine their status and possible need for more treatment. The measurements are made with the Geiger counter. The authors stress the need of caution in the handling of radioactive materials, since all of them are dangerous.

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Progress in Hair Coloring

(*Continued from page 223*)

4. The colored products thus formed are strongly colored, their colors are brilliant, and many of them are reasonably fast to light, air, and washing when formed within the keratin of hair.
5. The phenylenediamine molecule is small in volume, is mobile, and diffuses rapidly into keratin.

The principal disadvantages of p-phenylenediamine are its tendency to cause allergic reactions in sensitive individuals and a slight tendency for its colors, on hair, to fade to an objectionable reddish cast.

Hydrogen peroxide, the campanion to p-phenylenediamine is noteworthy because it is active in alkaline as well as in acid solutions. Its oxidation potential is a function of the square of the hydrogen ion concentration. With most highly oxygenated oxidizers, particularly anions of metal acids such as chromates, chlorates, and permanganates, the oxidation potential may be a function of the sixth or even eighth power of hydrogen ion concentration. As the reduction potential of the organic reducing agent changes rapidly and in complex fashion with increase in hydroxide ion concentration,

FIGURE 13
Optical Section of Hair Showing Cortex Only, Magnification 3000X

FIGURE 14
Optical Section Showing Overlapping Scale Pattern of Cuticle
Magnification 3600X

the net effect is to increase oxidation-reduction speed as pH value increases.

In spite of this increase in speed of net reaction, the speed still is that of nonionic organic reactions and is slow enough to permit reaction *in situ* within the keratin body. No great waste of premixed reactants occurs as the result of premature oxidation-condensation-precipitation outside of contact with the hair.

Further, hydrogen peroxide is a small molecule, is not highly hydrated, and its speed of diffusion into keratin permits it to migrate along with the other reaction components.

Finally, colors developed by peroxide oxidation of dye intermediates—of which so-called "Bandrowski's Base"[4] is a probable type formula—are large-molecule, difficulty soluble, adsorbed bases, which are wash- and light-fast. They are not affected by reducing agents used for permanently waving hair and they are not easily bleached by further oxidation. Their very resistance to discharge by the usual dye removing chemicals is one of their chief drawbacks.

Natural Color of Hair

In many respects the ideal hair colorings may be those that most nearly resemble nature's own. There seem to be two varieties of natural pigments. First, a brown occurring in discreet granules throughout the cortex or body of the hair shaft, but very little if any imbedded in the cuticle. This concentration of pigment is shown clearly in Figures 10-14. The second variety

(*Continued on page 246*)

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Determining Anethole in Anise Oil

In a discussion on the determination of anethole in oil of anise, D. Mori (*Chemie & Industrie* 59:160, 1948) states that pure anethole in solution in pure benzene is quantitatively converted by iodine monochloride into (1-iodo-2-chloropropyl)-paramethoxy-benzene. This, in turn, is converted, in the presence of potassium iodide, into the the 1, 2-diiodo derivative without change in the iodine consumption. In the presence of potassium iodide, the unreacted iodine monochloride is quantitatively converted into free iodine, which is titrated with sodium thiosulfate. In practice, an excess of 0.1 N sodium thiosulfate is added and the excess is titrated with 0.1 N iodine in the presence of starch. The method gives very satisfactory results in the determination of anethole in commercial oil of anise provided benzene is used as the diluent.

Indian Palmarosa Oil

The characteristics of pure palmarosa oil (Motia) and palmarosa oil (Sofia) or gingergrass oil were determined by K. Narian and P. N. Das Gupta (Indian *Soap J.* 13:259, 1948) The Motia oil had the following properties:

Specific gravity	**0.886–0.889**
Index of refraction	**1.4720–1.4780**
Specific rotation	**–3 to +5°**
Acid value	**0–3**
Ester value	**12–50**
Total geraniol	**78–94 per cent**

The Sofia oil samples showed the following characteristics:

Specific gravity	**0.900–0.955**
Index of refraction	**1.4780–1.4950**
Specific rotation	**–30 to 50°**
Acid value	**2–6**
Ester value	**8–40**
Total geraniol	**60–75 per cent**

Indian Dill Oil

From an examination of eighty samples of Indian dill oil, Hossain and Mukerji (*Indian Pharm.*, July, 1946, p. 169) conclude that, even though the Indian product may replace the dill oil of the British Pharmacopoeia for almost every purpose, it is not a true substitute for the official oil. Recommended standards for the Indian oil include the following:

Appearance	**colorless to light yellow or light brown**
Specific gravity	**0.920-0.950**
Optical rotation	**+47° to +60°**
Refractive index	**1.480-1.495**
Carvone content	**40-55 per cent**

Citral and Iso-Citral

It has often been stated in the perfumery literature, says W. Mitchell and H. J. Strausz (*Perfumery & Essent. Oil Rec.* 39:312, 1948) that citral isolated from lemon oil is superior in odor to that from lemongrass oil, and many perfumers prefer to use lemon oil citral, despite its higher price, in compounding certain of the more expensive types of handkerchief perfumes. Lemongrass citral is known to consist of a mixture of two isomers, citral *a* and citral *b*. They note that Verley had suggested that lemon oil citral consists mainly of another isomer which he termed γ-citral. Verley claimed to have synthesized γ-citral, and stated that its physical properties were similar to those of citral *a* and citral *b*, but that its odor was fresher and more akin to that of lemon oil citral. In view of the great similarity of odor and physical constants of *iso*-citral with those claimed by Verley for γ-citral, Mitchell and Strausz felt that these substances might be identical and represent the major constituent of lemon oil citral. This prompted a further examination of the matter. To this end three preparations of citrals were studied. The physical properties of the three preparations are summarized in Table 1:

Table 1—Physical Properties of the Various Citrals.

Product.	*Solubility in 60% v/v alcohol at 15.5°.*	*Boiling point at 12 mm. pressure.* (°C.)	*Specific gravity at 15.5°/15.5°.*	*Refractive index at 20°.*	*Aldehydes calculated as citral by hydroxylamine assay.* (per cent)
Lemongrass citral	**1 in 7**	**106 to 107**	**0.895**	**1.4885**	**99.5**
Lemon citral	**1 " 7**	**103 " 104**	**0.895**	**1.4858**	**99.2**
***iso*-Citral**	**1 "15**	**103 " 107**	**0.890**	**1.4835**	**85.3**

The behavior of the semicarbazones was interesting. They were prepared both by the usual sodium acetate method and also by the acetic acid method described by Tiemann. In each case they were recrystallized repeatedly from 70 per cent v/v methanol until their melting poihts were constant. Their melting points, and also the mixed melting points of 1 : 1 mixtures, are listed in Table 2:

Table 2

Melting Points and Mixed Melting Points (1 : 1) of Various Citral Semicarbazones

Semicarbazone.	*Melting Point. Sodium acetate method.* (°C.)	*Acetic acid method.* (°C.)
Lemongrass citral	**133**	**157**
Lemon citral	**135**	**160**
***iso*-Citral**	**132**	**140**
Lemongrass + lemon citral	**134**	**156**
Lemongrass + *iso*-citral	**133**	**145**
Lemon + *iso*-citral	**133**	**145**

These results confirm those of Tiemann in that the acetic acid preparation of the semicarbazones seems to permit the isolation of almost pure citral *a* semicarbazone by recrystallization, whereas the usual sodium acetate method does not. They also show that *iso*-citral is a chemical entity and is different from the lemon and lemongrass citrals, which appear to be identical.

The lemongrass citral was colorless and had a fine odor, which was, however, very slightly harsher than that of the lemon oil citral. The latter sample was also colorless, whereas the *iso*-citral was bright yellow. *iso*-Citral was rather unstable, but kept well as a 50 per cent solution in absolute alcohol. Its odor was mild, and resembled that of lemon oil citral very closely but was somewhat weaker. From a consideration of the data, these investigators are of the opinion that the very costly citral isolated from lemon oil offers no real advantage to the perfumer, since the same effects can be obtained in perfume compounding by using carefully purified

lemongrass citral judiciously blended with a trace of a selected fraction of lemon oil terpenes.

Temperature and Specific Gravity

As pointed out in a special bulletin of the Essential Oil Association of the U. S. (EOA), issued December 1, 1948 specific gravity specifications are considered important in commercial dealings concerned with essential oils, isolates and synthetics. Specific gravity determinations are customarily performed on virtually all liquid samples.

Essential oil houses tended to favor 15°/15° while representatives of aromatics manufacturers leaned toward 25°/25°.

Arguments relative to the use of either of these temperatures were assembled for the benefit of members who are asked to vote on this subject. A brief summary of the chief considerations are given in the bulletin as follows: (a) The Essential Oil Association defines specific gravity at 15°/15° and recommends a single correction factor for all products to calculate determinations to 15°/15° if actually carried out at a different temperature. (b) The single factor used may introduce errors up to .003 over a 10°C temperature interval. This is as much as the latitude in specific gravities permitted in some aromatics specifications in EOA, USP, and NF. (c) USP and NF base their specific gravity determinations on 25°/25° and they further specify that the determinations be made at 25°/25°. (d) The essential oil trade and important reference books on essential oils are based on 15°/15°. (e) Technical advantage of determination at 15°C: The Westphal balance comes normally equipped with a plummet calibrated for 15°/15° readings. Plummets for other temperature are available, however. (f) Technical advantages of determination at 25°C: Greater ease of operation because room temperature approximates 25°C—rather than 15°C (77°F versus 59°F); greater accuracy, due to smaller viscosity, diminished danger of collecting moisture on cooled sample and decreased errors of extrapolation when a single factor is employed; Wider application inasmuch as several products reach the crystalline stage between 25° and 15°C.

Suggestions for positions that the Association may elect to take are listed as follows: (a) Retain the present position, reporting specific gravities at 15°/15° extrapolating determinations at other temperatures by means of a single factor. (b) Retain the present position of reporting specific gravities at 15°/15° but in the future, establish and publish correct individual factors for all products. This involves considerable work and amounts to an admission that 15°C is not a convenient temperature for taking measurements. (c) Adopt in the future, the USP and NF practice of reporting and measuring specific gravities at 25°/25°. (d) Adopt in the future, the, the USP and NF practice of reporting specific gravities at 25°/25° and permit the determination at a related temperature (say 22°-28°C) making corrections by means of a single factor (probably more correctly .0006 per degree. (e) Adopt in the future generally the 25°/25° practice described under (c) or (d) by reason of the technical advantages enumerated before but retain the 15°/15° practice described under (a) or (b) for such products where usage in the trade makes this advisable in the opinion of the Scientific Section. This would apply particularly to certain essential oils.

Castoreum from Beavers

In the latest of his reports on animal products in perfumery, E. Hardy (*Perfumery & Essent. Oil Rec.* 39:315, 1948) discusses castoreum obtained from beavers. He states that most of the castoreum sold in America and Western Europe now comes from the Canadian beaver, although the Russian product still exists. The studies of various chemists have shown the constituents of the volatile oil to include benzyl alcohol, acetophenone, *l*-borneol, and in the resinous matter a crystalline substance called castorin. Castoreum was first studied in detail by Walbaum and Rosenthal in 1906 and 1927 and by Pfau in 1932. They found benzoic acid, acetophenone, benzilic alcohol, *p*-ethyl phenol, borneol and two phenols representative of *o*-cresol or *o*-ethyl phenol and cresol. Pfau also mentions the presence of a strong-smelling lactone, while Lederer more recently mentions finding, in addition to the substances isolated by the foregoing, alcohols as cholesterol ("castorine" of the ancients), dihydrocholesterol (b-cholesterol), a glycol, $C_{12}H_{24}O_2$, containing one or two groupings of CH_3–CHOH; and phenols as *p*-propylphenol, pyrocatechine, hydroquinone, ether monomethylique de l'hydroquinone, chavicol, gaiacol, creosol, ethyl-gaiacol, pyrocatechol, ethyl-pyrocatechol, *p*-oxyphenyl-butanol-3, 2, 4-dihydroxydiphenylmethane, two yellow pigments, derivatives of diphenyl, and three phenols not yet identified (135° F. $C_{11}H_8O_2$, 145° F. and 240° F.).

Free benzylic alcohol is found in the scent glands as neutral esters and phenols, genistic and the other phenolic acids are present. Several other substances have been found like a non-nitrogenous one, water-soluble at 173° F., and a phenolic ether 84°F., $C_{18}H_{18}O_2$, containing a tertiary amine $C_{18}H_{23}O_2N$ at 66° F. In 1943 and in 1945, Stevens, an American investigator, also reported on its composition. Altogether about 45 substances have been identified, plus several others not yet identified, making a total of some hundred constituents of castoreum. The presence of such a surprisingly large number of substances in the gland of an animal is explained by Lederer by the many glycosides, phenols, terpenes and so forth in the bark of the trees upon which the beaver feeds, most of which are passed in the urine of other animals, but in the case of the beaver they are mostly retained in its scent pouches, where they accumulate.

The pods of dried scent glands, about the length of the finger, when fresh are a viscid, creamy, greasy secretion. Since 1929 they have mostly been exported from Canada as extract prepared on the spot. The secretion is yellow-brown, bluish or reddish-brown. When the beaver is killed the scent glands or pear-shaped follicles are removed; they turn reddish-brown and resinous, and were formerly smoked or dried in the sun. The dried "pods" contain the crystalline principal of castoreum—castorin (4-5 per cent), with resin (40-70 per cent), benzoic acid, and salicin (traces), and a volatile oil (2 per cent) which gives the odor. They have a strong, objectionable odor like birch tar, and are usually employed as a tincture, tincture of castor consisting of 4 ounces extract and 1 gallon of alcohol. The tincture is prepared by removing the secretion from the pods and rubbing it down with orris root powder or clean silver sand, then macerating it for several days with twenty times its own weight of 90 per cent alcohol and filtering it cold. Compared with musk and civetone, the dark brown color of the tincture is a disadvantage. Benzene and ethyl are used as extractive agents, and the extract is merely dissolved in alcohol and used as a fixative in heavy types of oriental or chypre bouquets, and when compounding artificial ambers. It is also used to flavor raspberry, rum and claret wines, or to "give a lift" to the flavor. It was formerly used in medicine for hysterics, and other conditions.

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Abreast of the Markets

Mixed Price Trend in Fine Chemicals Noted. Further Decline in Ethyl Alcohol Eases Isopropyl Market.

A mixed price trend in the fine chemical market prevailed at the start of the new year. Despite the many price changes which became effective at the first of the year declines in some items were offset by advances in others.

Further price reductions were noted in the alcohol market which continued competitive to the extent that consumers were greatly benefited. Under pressure from the declining alcohol market, isopropyl alcohol was reduced from 4 to 5 cents a gallon. Trading in bismuth salts and in mercurials was very slow. The menthol market was quiet and there were indications that the coming months would bring lower prices to this commodity. Glycerin prices failed to soften but were expected to do so later in the year when the full impact of synthetic glycerin develops.

Increasing manufacturing costs, labor, and freight rates were combining to cause an advance in price February 1 on cinchophen, sodium cinchophen, sulphamerazine, sulphathiozole, and sulphadiazine, together with their sodium salts. A new form of riboflavin, claimed to be twelve times more soluble than the regular USP material, is now on the market at a premium of $50 per kilo over the USP price.

Amyl acetate dropped in price during the first week of the new year. Streptomycin salts of the regular types, and dihydrostreptomycin were both reduced in price the early part of January.

In legislation pending before the Brazilian Congress for extension beyond June 30, 1949, of the export-import licensing law, the Government requested that the present exemption from import license for pharmaceuticals be removed.

Alcohol Down Again

The structure of official price listings in the alcohol market took several further drops during the past month establishing a new low since this commodity entered the period of reaction from post-war levels. The reasons behind the further drop were mainly centered in the competitive situation in which large volumes of alcohol had to be moved in a relatively short period of time in a market characterized by excessive supplies. Accordingly, price cutting in some sections of the market were resorted to in an amount sufficient to bring down the price structure throughout the entire industry.

It was estimated by informed sources in primary markets that new crop molasses would make its appearance in early February at offerings of around 10c to 12c per gallon, but the feeling of most heavy buyers was that it would find few takers at that level, and purchases would lag until the offerings were brought down to a point considerably under such a level.

Meanwhile, conditions affecting alcohol were such that it seemed unlikely that prices would react to higher levels for a long time to come.

It was understood that when alcohol reached 41c per gallon that a major fermentation producer operating under a contract for molasses based on a sliding scale tied to the price of alcohol, could at his choosing alter or withdraw from the contract. There was considerable speculation as to what might be done under those circumstances, and the whole situation was being watched with intense interest.

Isopropyl Alcohol Drops

The still further declined ethyl alcohol market had its effect on isopropyl alcohol as prices fell another 4 to 5c per gallon. Isopropyl alcohol in many quarters is competitive with ethyl alcohol of the specially denatured formulas 23H and 2B. The former was quoted at 37½c per gallon and the latter at 38½c. Accordingly, price reductions on isopropyl alcohol set new schedules at 33½c per gallon for the 91 per cent grade, 35c for the 95 per cent grade, and 36½c for the 99 per cent grade. These quotations are based on tankcar quantities, and the usual differentials between tankcars and drum quantities prevailed.

• Prices quoted in this section were current on the first of this month.

Camphor Prices Lowered

One of the outstanding developments in the market under review was the reduction of 5c to 8c per pound in synthetic refined USP camphor used as a moth preventative, a counter irritant in medicinals, and in pharmaceuticals. The reduction which establishes the ton price for USP powdered material at 58c a pound represents the first change since January 1, 1948.

Although it is understood that virtually all available lots of natural powdered camphor have been absorbed on spot, reports in the market indicate that there are fairly substantial quantities available for shipment from Japan and some shipping prices as low as 46c per pound, f.o.b. shipping port have been received.

Container Situation

Glass container production now evidently is fully sufficient to take care of drug and chemical requirements. Production for medical and health supplies during 1947 amounted to about 11 million gross of narrow neck, and 3 million wide mouth containers. Production for 1948 was probably around 12 million gross narrow neck and 10 million gross wide mouth. These totals do not include glass containers for chemicals.

During the month of November 1948 stocks of all glass containers amounted to 8,280,777 gross, an increase of 6% over October, while production footed up to 7,313,000 gross, a decline of 19%. Glass containers for chemicals are thrown together with those for household and industrial use, and this category is less than 10% of total narrow neck production and much less in the instance of the wide mouth containers.

Paper containers are fully normal for the chemical and drug trades at this time and for some descriptions may even be excessive. The fiber drum has been permanently adopted for the shipment of many bulk commodities in dry form, even for synthetic vitamins and pharmaceuticals costing more than $1,000 per pound. In many other cases bags have replaced the drum and tin container.

An indication of this latter development is contained in the recent an-

(Continued on page 241)

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California Lemon Oil Advances on Reports of Crop Damage. Orange Oil Not Affected As Yet.

Prices on California lemon oil were raised during January to a basis of $2.90 to $3 per pound. The range covered minimum quotations as to dealer. This development followed closely the widespread reports of unusual cold weather in California with resulting damage to the citrus crops. The actual damage is very great but may never be known accurately. Some surprise was expressed in the trade at the price trend of lemon oil since fresh fruit is not used in the production of citrus oil. It was anticipated that growers would endeavor to recoup some of their heavy losses by processing damaged fruit but only time will tell to what extent this expedient was carried out.

There was no price change at this writing in California orange oil the sweet USP grade being quoted at $1.75 per pound in 25 pound cans or 385 pound drums.

Citronella Position

Fear that exports of citronella oil from the Far East may be curtailed by the political situation that finds the Dutch government displacing that of Indonesians, is only partly substantiated. Only Java oil would come within this situation. Exports from Ceylon should be unimpeded.

In West Java the area now under citronella cultivation does not exceed 1,000 hectares, consisting mainly of old and neglected crops. In pre-war years the area under cultivation was about 7,000 hectares. The Netherlands Indies export duty on citronella oil was reduced on May 25, 1948, from 20 to 3 percent to stimulate exports, the foreign press states.

Citronella oil exports from Ceylon in the third quarter of 1948 totaled 382,268 pounds, valued at 795,114 rupees. Of this amount the United States took 75,678 pounds, 156,705 rupees. Citronella oil prices which had averaged 1.92 rupees (US $0.58) a pound between April and June 1948 varied between 1.75 and 1.90 rupees (US $0.53 to $0.57) during the months June through September.

Declared exports of citronella oil through the port of Shanghai, China, to the United States during the first 10 months of 1948 totaled 47,474 pounds, valued at $42,066. In October alone, such exports amounted to 11,200 pounds, valued at $10,115.

Developments in Essential Oils, France

The essential oils industry of Grasse improved its position in 1948, although exports to the United States remained at the same level as in 1947. New orders came from the Paris perfume industry. Sweden, the United Kingdom, and Switzerland—markets that had been only of slight importance—became increasingly active. Local trade sources believe that Spain presents extensive sales possibilities, if the Spanish Government will agree to transfers of funds.

Exports of perfumery products from the Maritime Alps had a value of 130,000,000 francs in October 1948, compared with 88,000,000 francs in the preceding month.

Declared exports of perfumery products to the United States from the Nice consular district in October 1948 had a value of $46,705, slightly higher than that in the corresponding month of 1947. During the corresponding month of 1946, such exports were valued at $146,348.

Exports of Essential Oils and Perfume Materials, Hong Kong

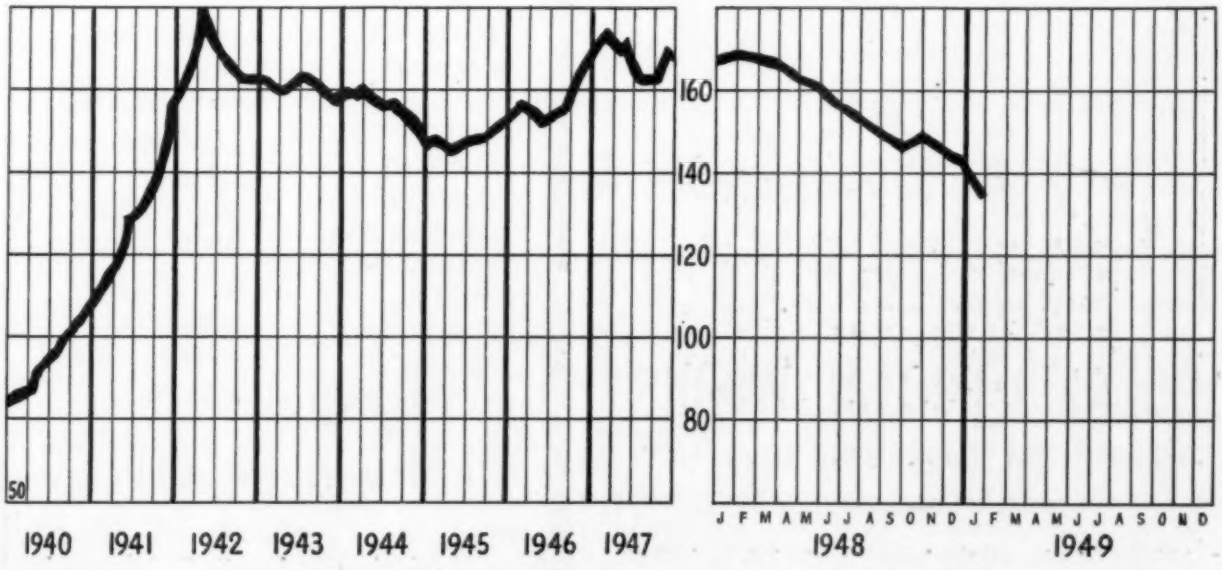
Hong Kong's declared exports of essential oils to the United States during the first 10 months of 1948 consisted of the following items: Cassia, 50,400 pounds ($70,372); citronella 45,277 pounds ($48,115); aniseed, 209,950 pounds ($127,506); camphor, 86,107 pounds ($22,589); and ho (Shiu) oil, 4,636 pounds ($5,175).

Declared exports of perfume materials to the United States from Hong Kong during the first 10 months of 1948 included the following items: Geraniol, 360 pounds, valued at $594; musk, 162 pounds ($19,876); safrol, 2,540 pounds ($668); and flower water, 63 pounds ($107).

Vanilla Prospects

Most sellers of vanilla were inclined to look for higher prices, possibly to

50 Raw Materials—Weighted Price Index. 1926 = 100.



The price index of fifty commodities for January declined from 141.8 to 134.2.

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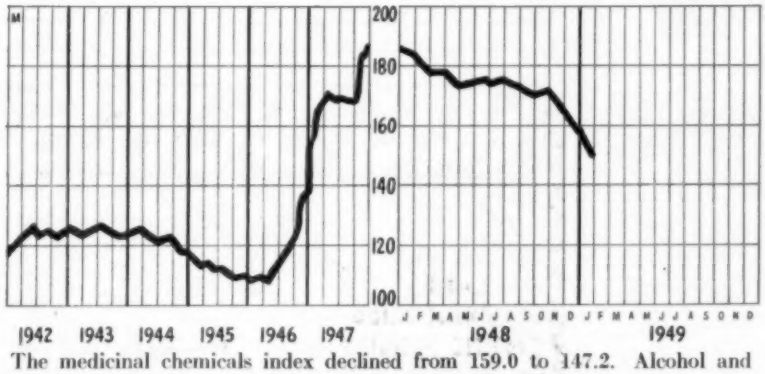
JANUARY PRICE CHANGES

UP	DOWN
Anise Oil USP 2c	Agar Agar #1 30c
Camphor Natural 25c	Alcohol Den #1 Spec. 14c
Caraway Oil 25c	Ethyl 14c
Cardamom Oil $7	Amyl Acetate 3½c
Carvol 50c	Beeswax White 1c
Citral 25c	Benzyl Benzoate 12c
Clove Oil 5c	Bois de Rose, Brazilian 10c
Coriander Oil $1	Cananga Oil Native $1.35
Cubeb Oil 25c	Rectified 90c
Erigeron $2.75	Candelilla Wax 10c
Eugenol 20c	Cod Liver Oil 20c per gal
Iso Eugenol 30c	Epsom Salts 15c
Isopropyl Alcohol 2c	Ether USP 17c
Karaya Gum 1c	Lavender Spike Oil 30c
Lavander Oil 20c	Senega Root 2c
Lemon Oil California 35c	Silver Nitrate 7⅜c
Lemon Grass Oil 5c	Spearmint Oil 35c
Theobromine $1.75	Stearic Acid TP 4½c
Zinc Oxide 2c	Terpineol 1c
	Witch Hazel Leaves 10c
	Wormseed Oil 25c

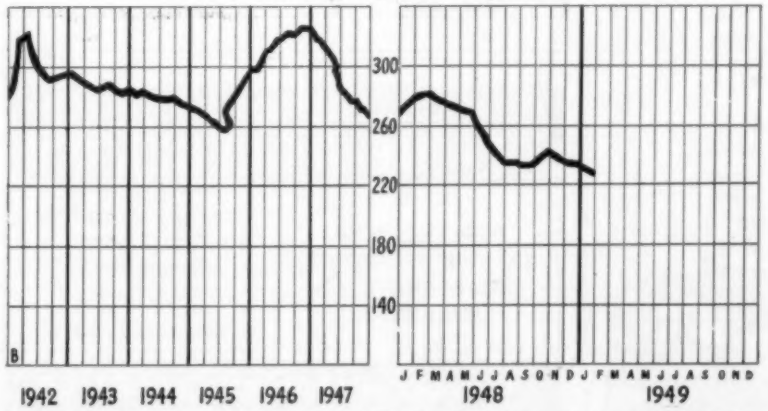
develop as early as the first quarter of this year, but, in any event, before the end of 1949. These beliefs were based on the idea that destruction of such large quantities in the French islands has resulted in a supply probably insufficient to meet the United States requirements during the next two years and can be considered in no light other than that of a bullish effect on prices. The 1948-49 crop has been reported a total failure and unless that situation has been overstated, it would be added material to the argument that a reversal of price trend is likely.

15 Medicinal Chemicals—Weighted Price Index. 1926 = 100.



The medicinal chemicals index declined from 159.0 to 147.2. Alcohol and cod liver oil were lower.

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 238.7 to 234.3. Agar dropped from $3.55 to $3.25.

New Production Records Set By Antibiotics

The striking success of penicillin and streptomycin may be the forerunner of even greater accomplishments in the field of antibiotics. One manufacturer has placed aureomycin in production, and others are reported to be turning out chloromycetin and bacitracin experimentally.

There is a prospect that both of the newer products will be on the market shortly or at least be made available to hospitals at an early date. The third new antibiotic considered some time ago by chemical producers for commercial operations is polymyxin. The project has been shelved temporarily in favor of more promising materials.

The expansion in antibiotic administration, manufacture, and supply is little short of amazing. In the 10 months ending with October 1948, drug and chemical manufacturers produced something like 76.6 trillion Oxford units of penicillin. For the same time in 1947 the figures were 30.6 trillion units.

In the same 10 month period some five or six manufacturers brought the output of streptomycin, still a comparatively new product, up to 27,010,926 grams and production was still increasing at the close of October.

Cod Liver Oil Output, Iceland

Iceland's cod liver oil output in 1948 is estimated at 35,500,000 crowns (6.505 crowns equals US $1), or 39 percent higher than in 1946. Cost estimates are as follows (percentage increases over 1946 in parantheses): Foreign raw material, 928,000 crowns (mainly packing material, 111 percent): and domestic raw materials, 26,847,000 crowns (41 percent). Part of the advance in costs is due to price increases.

During the first 9 months of 1947, the value of cod liver oil output was 25,000,000 crowns. In that period, the cost of foreign raw material was 455,000 crowns, and that of domestic materials, 20,661,000 crowns. Operations during the first 9 months of 1947 represent a value almost as large as that during the entire year 1946. This gain was attributed to the increase in the fish catch as a result of the expansion of the fishing fleet.

The above figures are based upon reports from the three largest cod liver oil refineries, which account for most of the business.

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Cod Liver Oil Down

The Norwegian government controlled price on USP cod liver oil was reduced last week to the equivalent of 20c per gallon in United States money. All other grades were reduced accordingly. This brought current quotations for USP cod liver oil on the American market to within the range of $2.40 to $2.45 per gallon. The reduction at primary markets was the result of the suggestions of major American factors made directly to the Norwegian government to the effect that the price of cod liver oil was out of line on the American market with competitive materials as a source of vitamins.

Ephedrine to be Made in Japan

The Japanese Institute of Scientific and Industrial Research of Osaka University is reported to have successfully worked out the production of ephedrine to the pilot-plant stage, and it is expected that one or more manufacturers will adopt the process, according to foreign press reports. The institute is also reported to be setting up a pilot plantu tilizing new techniques of vacuum distillation for making vitamin A.

Rutin Price Cut Is Result of Competition

The situation in rutin has become increasingly competitive, resulting in a decline in price of 4½ cents per gram. The price level at the opening of the month was 12 cents per gram for lots of from one to ten kilograms. This relatively new product, produced from buckwheat, is increasing in use slowly. However, there are several makers of the product and price shading for orders for this product, which is a relatively high priced chemical, has been frequent.

Agar Down

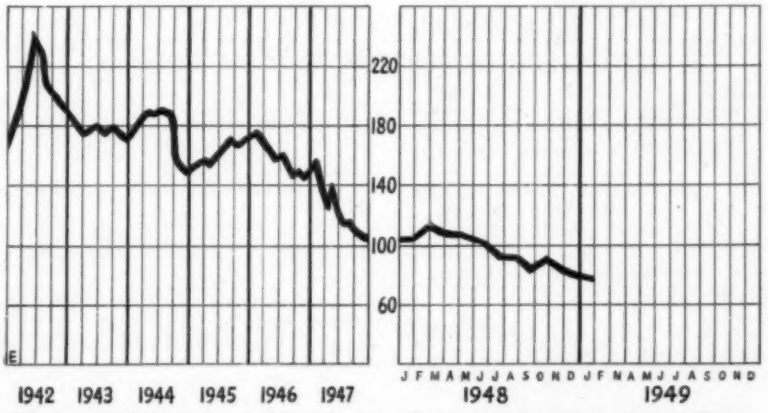
Not a great deal of busiess was done in the agar spot market,npossibly because major manufacturing consumers were holding aloof until such time as new crop material should be put up for bid in Japan. That should be sometime in the early part of February. On the spot, the market was lower at $3.10 for No. 1 Kobe and importers so quoting added that the import cost of today and in the future will likely be higher than the spot price suggested. The American consul general at Hong Kong has reported that exports to the United States from the British crown colony during the period January-August, 1948, totaled 54,502 pounds; August exports alone totaled 27,589 pounds.

Menthol Soft

The spot menthol market was dull to the extent that even jobbing orders were welcomed by importers. The latest price received from Brazil was $18 per kilo, c & f New York in bond. This would work out at about $8.18 per pound to which figure would have to be added a duty of 50c per pound, making $8.68, and an insurance charge not known at this time. The offering referred to above was for the February-March position. Spot quotations were $9 per pound as a minimum of open quotes but the market was soft and it was admitted that buyers willing to submit a reasonable bid stood an excellent chance of its being accepted.

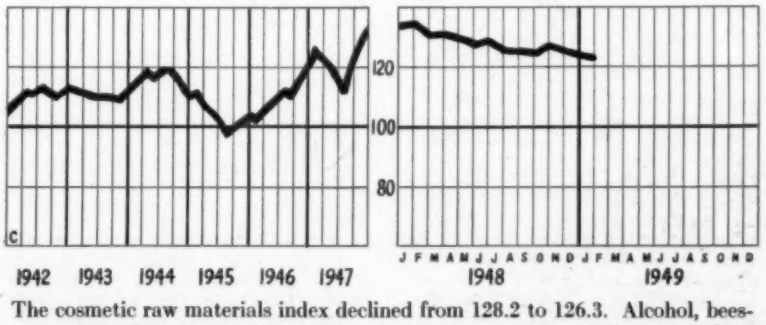
Exports from Hong Kong during January-August totaled 5,095 pounds, according to the American consul general at that point. The August outmovement alone was 1,800 pounds.

15 Essential Oils—Weighted Price Index. 1926 = 100.



The essential oils index declined fractionally from 84.8 to 84.1. Bois de Rose, Cananga, and Clove oil were lower. Anise, Lavender, and Lemon oils advanced.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926 = 100.



The cosmetic raw materials index declined from 128.2 to 126.3. Alcohol, beeswax, candelilla wax, and stearic acid were lower. Zinc Oxide advanced.

Container Situation

(*Continued from page 235*)

nouncement of the Monsanto Chemical Co. that prices for phenolic molding powder in bags and drums had been reduced. Widespread acceptance of bag packaging had resulted in a reduction of 0.75 cent to 17 cents per pound in bags, while the price in drums was lowered 0.5 cent to 17.5 cents per pound. The savings derived from the use of the bag container is thus passed on to the consumer.

Makers Cut Theobromine, Theophylline, Aminophylline

Because of competitive conditions, quotations on theobromine and aminophylline have been reduced. Theobromine, which attained considerable prominence shortly after the war when resale lots were commanding as high as $10 per pound, has been reduced 75c per pound thus establishing the base price for alkaloid at $5.25 per pound.

New and lower prices on the salts follow: theobromine and sodium acetate $4 per pound; theobromine sidio salicylate, NF $3.15; theobromine salicylate, NF true sale $5 per pound.

The reduction in theophylline of 40c per pound establishes the base price at $7.60 per pound. Aminophylline, off 35c per pound, is available at $7.90. All of the above chemicals are used in medicinals.

Your Trade-Mark Record

(Continued on page 217)

Alexandra de Markoff—VI—C—540,-845
Alexandra de Markoff, Inc. N. Y., N. Y.
Ser. Nov. 12, 1947 D. U. Oct. 1929

American Beauty—VI—C—524,134
Richard Hudnut, N. Y., N. Y.
Ser. June 13, 1947 D. U. June 5, 1947

Anatole Robbins—VI—ABCIH—524,-283
Anatole Robbins, Inc. dba
Anatole Robbins, Los Angeles, Cal.
Ser. Oct. 15, 1947 D. U. Oct. 1938

Ann Haviland—VI—BC—534,438
Haviland Lab. Inc., N. Y., N. Y.
Ser. Sept. 13, 1947 D. U. 1925

Ascrin—VI—T—552,080
Patrick and Hudson Drug Co., Bladensburg, Md.
Ser. Mar. 16, 1948 D. U. July 1, 1947

Avonette—VI—C—509,557
Avon Products Inc., N. Y., N. Y.
Ser. Sept. 23, 1946 D. U. Sept. 19, 1946

Avoglow—VI—C—536,669
Jacqueline Cochran dba Jacqueline Cochran Cosmetics, Newark, N. J.
Ser. Oct. 3, 1947 D. U. Aug. 28, 1947

Bannister—VI—C—489,164
Constance Bannister, New York, N. Y.
Ser. Sept. 29, 1945 D. U. Aug. 30, 1945

Bathasweet—IV—A—550,777
Bathasweet Corp., New York, N. Y.
Ser. Feb. 28, 1948 D. U. Oct. 1, 1947

Beautina—VI—C—550,156
George A. Lawrence, New York, N. Y.
Ser. Feb. 19, 1948 D. U. Feb. 6, 1948

Bergamot—VI—I—441,434
Jean Vivaudou Co., Inc., N. Y., N. Y.
Ser. May 29, 1946 D. U. June 1943

Billowing—VI—A—527,534
Robert H. Clark, dba Robert H. Clark Co., Beverly Hills, Cal.
Ser. July 5, 1947 D. U. Nov. 1939

Blanch Dunlap—VI—CH—514,271
Blance Dunlap Glass, dba Brown Palace Beauty Salon, Denver, Colo.
Ser. Dec. 14, 1946 D. U. Jan. 1, 1938

Blue Cross—VI—E—509,655
Leo Haber, dba Equalife Lab., Los Angeles, Cal.
Ser. Sept. 24, 1946 D. U. Feb. 1939

Blue Rose—VI—ABCH—525,603
Lanchere, Inc., Chi., Ill.
Ser. Dec. 18, 1947 D. U. Mar. 26, 1912

Bois De Boulogne—IV—A—560,906
Les Parfums de Dana, Inc., N. Y., N. Y.
Ser. July 8, 1948 D. U. May 24, 1948

Bonat—VI—AH—538,596
Samuel Bonat & Bro., Inc., N. Y., N. Y.
Ser. Oct. 22, 1947 D. U. 1912

Cadet—VI—M—525,918
A. John Miller, dba Cadet Lab., Worcester, Mass.
Ser. July 3, 1947 D. U. April 1939

Champlain Hairgrow—VI—H—503,-549 (and Des.)
John H. Camp Plattsburg, N. Y., N. Y.
Ser. Mar. 12, 1948 D. U. Aug. 30, 1946

Chantilly—VI—BC—535,844
Houbigant Inc., N. Y., N. Y.
Ser. Sept. 26, 1947 D. U. Feb. 10, 1941

Chap-Ans—VI—C—551,573
Morton Manf. Corp., dba Chap Stick Co., Lynchburg, Va.
Ser. Mar. 9, 1948 D. U. Feb. 25, 1948

Clair-Obscur-Chiaroscuro — VI — BCH—513,875
Pierre Charton, Montreal, Quebec, Canada
Ser. Dec. 7, 1946 D. U. Nov. 1, 1945

Coffette—VI—A—559,278
Cofette Products, Inc., Bklyn., N. Y.
Ser. June 16, 1948 D. U. June 1, 1940

Color-Lur—CI—H—524,422
Murray Rock, dba Murray Rock & Co., Dayton, Ohio
Ser. June 18, 1947 D. U. Mar. 13, 1947

Concreta—VI—BC—551,357
Benard & Honnorat, dba Mollinard, Grasse, France
Reg. Jan. 28, 1941 D. U. Dec. 30, 1925

Conti—IV—A—547,405 (with Des.)
Contil Products Corp., Bklyn., N. Y.
Ser. Oct. 2, 1947 D. U. April 1937

Conti Verde—IV—A—560,548 (with des)
Conti Products Corp., Bklyn., N. Y.
Ser. July 1, 1948 D. U. Nov. 1947

Contoure'—VI—BCDE—546,351
A. Breslauer Export Corp., N. Y., N. Y.
Ser. Jan. 7, 1948 D. U. June 17, 1926

Copper Tan—VI—S—502,524
Copper Tan, Inc., N. Y., N. Y., dba Copper Tan Mfg. Co.
Ser. Mar. 10, 1948 D. U. May 17, 1939

Countess Isserlyn—VI—C—524,284
Anatole Robbins, Inc., dba Anatole Robbins, Los Angeles, Cal.
Ser. Dec. 2, 1947 D. U. Apr. 14, 1942

Debutante—VI—CD—538,719
Daggett & Ramsdell, N. Y.
Ser. Feb. 4, 1948 D. U. Jan. 1913

Deloney's Skalp Kumfort—VI—H—513,300
DeLoney & Co., Chi., Ill.
Ser. Aug. 12, 1947 D. U. 1940

Dentur-Aid—VI—K—503,841
William Miller, dba Roswill Lab., Washington, D. C.
Ser. Mar. 8, 1948 D. U. Oct. 13, 1934

Derbac—IV—A—543,779
Ceral Soaps Co., Inc., N. Y., N. Y.
Ser. Dec. 9, 1947 D. U. Sept. 1920

Designer—VI—BCDH—542,536
Consolidated Cosmetics, Chi., Ill.
Ser. Nov. 28, 1947 D. U. Oct. 2, 1947

Dif—IV—A—529,370
Dif. Corp., Garwood, N. J.
Ser. July 24, 1947 D. U. Feb. 1928

Dispelent—VI—T—506,275
United Cigar-Whelan Stores Corp., New York, New York
Ser. July 25, 1946 D. U. Feb. 1, 1946

Distinguished Service—IV—I—551,-610
Colgate-Palmolive-Peet Co., Jersey City, N. J.
Ser. Mar. 10, 1948 D. U. Jan. 13, 1948

Dorothy Gray—VI—ABC—558,145
Lehn & Fink Products Corp., Bloomfield, N. J.
Ser. May 29, 1948 D. U. 1916

Dorothy Reed—VI—C—518,468
Lander Co., Inc., N. Y.
Ser. July 24, 1947 D. U. Jan. 29, 1948

Double Q—IV—A—531,028
Great Struff Products Inc., Minn., Minn.
Ser. Aug. 11, 1947 D. U. 1930

Du Barry Rose—VI—C—523,267
Richard Hudnut, New York, N. Y.
Ser. May 29, 1947 D. U. Feb. 20, 1947

Evan Williams—VI—AH—513,168
Evan Williams Co., Ltd., London, Eng.
Ser. Nov. 25, 1946

Evergreen—IV—A—549,827
Murphy Lav. Inc., Clifton Heights, Pa.
Ser. Feb. 16, 1948 D. U. Apr. 15, 1944

Evening White—VI—C—543,468
Plexo Preparations Inc., N. Y., N. Y.
Ser. Sept. 13, 1947 D. U. Oct. 5, 1911

Evettes—VI—B—553,735
Parfums Wiel Paris Co., N. Y., N. Y.
Ser. Apr. 2, 1948 D. U. Mar. 18, 1948

Elixir de Guerlain—VI—K—538,540
Guerlain Perfumery Corp., N. Y., N. Y.
Ser. Oct. 21, 1947 D. U. Feb. 1923

Evyan—VI—V—487,539
Evelyn Westall, dba Parfums Evyan Co., N. Y.
Ser. May 5, 1948 D. U. Aug. 22, 1945

Faithfully Yours—VI—B—512,008
Luziers, Inc., Kansas City Mo.
Ser. Nov. 4, 1946 D. U. Oct. 21, 1946

Fashion Plate—VI—C—518,324
Revlon Products Corp., N. Y., N. Y.
Ser. Feb. 28, 1947 D. U. May 14, 1946

Fess-Up—VI—H—547,464
Wilfred H. Lange, dba M. Lange Beauty Products, Rochester, N. Y.
Ser. Jan. 19, 1948 D. U. Jan. 8, 1948

Flaroma—VI—BC—520,246
The Abietsam Mfg. Co., Ltd., London, England
Ser. Apr. 7, 1947 D. U. July 11, 1932

Foaming Bath Sachet—VI—A—(and Des.) 527,533
Robert H. Clark, dba Robert H. Clark Co., Beverly Hills, Cal.
Ser. July 5, 1947 D. U. July 18, 1939

Foundation Mist—VI—C—537,026
Elmo, Inc., Philadelphia, Pa.
Ser. Oct. 7, 1947 D. U. Apr. 12, 1938

Fred The Hairstylist—VI—CG—517,-984
Fred The Hairstylist, Inc., N. Y., N. Y.
Ser. Feb. 24, 1947 D. U. Mar. 1, 1933

Fresh—VI—D—543,373
The Pharma-Craft Corp., N. Y., N. Y.
Ser. Dec. 11, 1947 D. U. Oct. 10, 1930

Gay Heart—VI—C—541,410
Gay Heart Beauty Aids, Ltd., Houston, Tex.
Ser. Nov. 17, 1947 D. U. Nov. 10, 1947

Gay Manhattan—VI—ABC—549,132
Daggett & Ramsdell Inc., N. Y., N. Y.
Ser. Feb. 9, 1948 D. U. Nov. 29, 1945

G. D. T.—VI—AH—549,086
Raymond Labs., Inc., St. Paul, Minn.
Ser. Feb. 7, 1948 D. U. June 11, 1946

Germolysin—VI—M—546,537
A. J. Affleck, dba Affleck Labs., Sacremento, Cal.
Ser. Jan. 9, 1948 D. U. 1935

Gendarme—VI—BC—556,457
Lentheric Inc., N. Y., N. Y.
Ser. May 7, 1948 D. U. Apr. 14, 1948

Giant—IV—A—529,852
Armour & Co., Chicago, Ill.
Ser. July 29, 1947 D U. Oct. 1922

Gleem—VI—K—546,605
Procter & Gamble Co., Cinn., Ohio
Ser. Jan. 9, 1948 D. U. Jan. 19, 1939

Glendale—IV—A—554,095
Clover Farm Stores Corp., Cleveland, Ohio
Ser. Apr. 8, 1946 D. U. Feb. 1, 1900

Glomeco—VI—CM—516,983
Herbert C. Henley, dba Globe Medicine Co., Kinston, N. C.
Ser. Feb. 5, 1947 D. U. Jan. 1, 1944

Gloria Fay—VI—C—535,350
John E. Respondek, dba Gloria Fay, Detroit, Mich.
Ser. Sept. 23, 1947 D. U. June 1, 1937

Glo-Top—VI—E—531,013
Beauty Counselors, Grosse Pointe, Mich.
Ser. Aug. 11, 1947 D. U. July 25, 1947

Golden Blaze—VI—M—514,049
Lentheric, Inc., N. Y., N. Y.
Ser. Dec. 11, 1946 D. U. July 5, 1946

Golden Key—VI—K—550,228
The Great American Tea Co., N. Y., N. Y.
Ser. Feb. 20, 1948 D. U. Dec. 4, 1942

Golden Key—VI—K—550,229
The Great American Tea Co., N. Y., N. Y.
Ser. Feb. 20, 1948 D. U. Dec. 4, 1942

Green Velvet—VI—B—540,457
Helena Rubenstein, Inc., N. Y., N. Y.
Ser. Nov. 7, 1947 D. U. July 30, 1947

Ha-Gan—VI—H—538,040
Frances J. Robinson, dba Jeanene Robinson Preparations, Ely, Nev.
Ser. Oct. 16, 1947 D. U. Sept. 18, 1947

Halt—VI—D—514,125
The Mennen Co., Newark, N. J.
Ser. Dec. 12, 1946 D. U. Nov. 1, 1946

Hospital Green—IV—A—529,855
Armour & Co., Chicago, Ill.
Ser. July 29, 1947 D. U. 1920

Halitone—VI—K—523,314
Halitosine Co., St. Louis, Mo.
Ser. May 31, 1947 D. U. Apr. 16, 1925

Harcourt—VI—B—530,058
Joseph Stanley Clark Allendale, N. J.
Ser. July 31, 1947 D. U. July 29, 1947

Harriet Hubbard Ayer—VI—C—542,268
Harriet Hubbard Ayer Inc., N. Y., N. Y.
Ser. Nov. 25, 1947 D. U. Oct. 1, 1907

Hair Milk—VI—H—530,401
Frank X. Hess, dba Hess Hair Milk Labs., St. Paul, Minn.
Ser. Aug. 4, 1947 D. U. Sept. 1906

Hilskin—VI—M—550,620
Seattle Drug Co., Inc., Seattle, Wash.
Ser. Feb. 26, 1948 D. U. May 1, 1947

Industrial—IV—A—529,854
Armour & Co., Chicago, Ill.
Ser. July 29, 1947 D. U. June 19, 1930

Janet Hester—VI—B—503,701
George C. Hester, Los Angeles & Hollywood, Cal.
Ser. Oct. 13, 1947 D. U. Sept. 10, 1946

Jewelite—VI—A—512,287
Pro-Phy-Lac-Tic Brush Co., Northampton, Mass.
Ser. Nov. 8, 1946 D. U. Apr. 5, 1940

Lady Eve—VI—BCEH—498,652
Ferdinand Ruggiero, Inc., Boston, Mass.
Ser. Mar. 20, 1946 D. U. Mar. 4, 1946

Lady Love—VI—B—(And Des.) 514,248
Bassett Co., Columbus, Ohio
Ser. Dec. 14, 1946 D. U. Nov. 11, 1946

Lady Theresa's—VI—H—545,038
Theresa V. Rivers, N. Y., N. Y.
Ser. Dec. 20, 1947 D. U. Aug. 15, 1947

Lamoraga—VI—AC—521,159
Louise S. Tibbetts, dba Lamoraga Specialties, Moraga, Cal.
Ser. Apr. 22, 1947

Lanselle—VI—BC—509,222
Lanselle Parfumeur S. A. R. L., Paris, Fr.
Ser. Sept. 13, 1947 D. U. May 17, 1935

Launette—IV—A—527,729
The Procter & Gamble Co., Cinn., O.
Ser. July 5, 1947 D. U. July 1, 1932

Lecourt—VI—B—532,489
George R. Parkinson, dba Jean-Louis Le Court Co., N. Y., N. Y.
Ser. Aug. 26, 1947 D. U. Dec. 15, 1939

Lesquendieu—IV—A—554,313
Lehn & Fink Products Corp., Bloomfield, N. J.
Ser. Apr. 10, 1948 D. U. 1904

Lip Ade—VI—C—501,972
Roger & Gallet, N. Y., N. Y.
Ser. Nov. 1, 1947 D. U. 1945

Lo—IV—A—502,797
Geraldine F. Brown, dba Brown Labs., Phila., Pa.
Ser. May 27, 1946 D. U. Jan. 1932

Love Magic—VI—B—546,311
Morton Mfg., dba Snow White Prods. Co., Lynchburg, Va.
Ser. Jan. 6, 1948 D. U. Oct. 27, 1947

Lustr Lox—VI—C—513,830
Lus Tr Lox Products Inc., Salt Lake City, Utah
Ser. Dec. 6, 1946 D. U. Jan. 1936

Lustrasilk—VI—CEH—546,757
Jose B. Calva, dba J. B. Calva & Co., Minn., Minn.
Ser. Jan. 12, 1948 D. U. Nov. 28, 1947

Madam Elizabeth Nelson—VI—H—(And Des.) 521,676
Madam Elizabeth Nelson, Detroit, Mich.
Ser. Mar. 1, 1947 D. U. Jan. 1, 1920

Magic Touch—VI—C—560,551
DiMitt's, Oklahoma City, Okla.
Ser. July 1, 1948 D. U. Oct. 1, 1926

Margo Masque—VI—C—537,027
Elmo, Inc., Phila., Pa.
Ser. Oct. 7, 1947 D. U. Dec. 1927

Mayplex—VI—H—(And Des.) 522,298
Mary L. Allen, Newark, N. J.
Ser. May 12, 1947

McBrady's—VI—CD—551,124
J. E. Brady & Co., Chicago, Ill.
Ser. Mar. 3, 1948

Mem—IV—A—543,638
Mem Co., N. Y., N. Y.
Ser. Dec. 6, 1947 D. U. Mar. 29, 1921

Mennen—IV—AI—543,208
The Mennen Co., Newark, N. J.
Ser. Dec. 3, 1947 D. U. Jan. 1926

Mennen—VI—C—543,311
The Mennen Co., Newark, N. J.
Ser. Dec. 4, 1947 D. U. July 12, 1889

Mil-Ett—VI—H—542,680
Superior Beauty Products Co., Chicago, Ill.
Ser. Nov. 28, 1947 D. U. Nov. 21, 1947

M. Louis—VI—AHG—539,071
Louis Napolitan, dba M. Louis Products Co., N. Y., N. Y.
Ser. Oct. 25, 1947

Morning Glory—VI—B—(And Des.) 534,535
Andrew Jergens Co., Cinn., Ohio
Ser. Sept. 15, 1947 D. U. Mar. 1941

Mountain Maid—VI—CDH—537,059
Helen McHenry, Toledo, Ohio
Ser. Oct. 7, 1947 D. U. May 12, 1947

Must—IV—A—546,880
Scientific Supply Co., Denver, Col.
Ser. Jan. 13, 1948 D. U. Oct. 30, 1947

Nail-Style—VI—E—552,833
George R. Brent, dba G. R. Brent & Co., Chicago, Ill.
Ser. Mar. 24, 1948 D. U. Feb. 26, 1948

Napier—VI—BC—540,852
The Napier Co., Meriden, Conn.
Ser. Nov. 12, 1947 D. U. Aug. 6, 1925

No. 37 A Udley—VI—BC—(And Des.) 539,166
The Herb Farm Shop, Ltd., Elizabeth, N. J.
Ser. Oct. 27, 1947 D. U. Feb. 18, 1947

No Equal—VI—K—528,718
John J. Harris, dba No Equal Prods., Co., & Nature's Mineral Health Food Shop, Chicago, Ill.
Ser. July 16, 1947 D. U. Dec. 2, 1927

No-Equal—IV—A—527,735
Procter & Gamble Co., Cinn., O.
Ser. July 5, 1947 D. U. July 1930

Non-Pareil—IV—A—527,680
Procter & Gamble Co., Cinn., O.
Ser. July 5, 1947 D. U. Aug. 1938

Norwood—VI—AHI—549,131
Curley Co., Inc., Phila., Pa.
Ser. Feb. 9, 1948 D. U. June 30, 1888

Odorbase—VI—M—538,442
Odorbase Mfg. Co., N. Y., N. Y.
Ser. Oct. 20, 1947 D. U. Sept. 1908

Oh, Please—VI—B—516,290
Jean-Pascal Lorriaux & Co., Paris, Fr.
Ser. Jan. 24, 1947 D. U. Feb. 12, 1946

Opening Night—IV—A—(And Des.) 534,155
Lucien LeLong, Inc., Chicago, Ill.
Ser. Sept. 11, 1947 D. U. Mar. 1942

Opening Night—VI—BC—(And Des.) 534,156
Lucien LeLong, Inc., Chicago, Ill.
Ser. Sept. 11, 1947 D. U. Mar. 1942

Orvus—IV—A—528,029
Procter & Gamble Co., Cinn., Ohio
Ser. July 5, 1947 D. U. Nov. 4, 1932

Parfumerie Claire—VI—ABC—545,201
John Wanamaker, Philadelphia, Pa.
Ser. Dec. 22, 1947 D. U. 1910

Pearly Foam—IV—A—476,302
Nopco Chemical Co., Harrison, N. J.
Ser. Sept. 6, 1947 D. U. Aug. 31, 1944

Per-Aid—VI—D—506,014
Cyeton Products, Los Angeles, Cal.
Ser. July 22, 1946 D. U. July 1, 1946

Perfuma Saltz—VI—M—510,635
Adco, Inc., Sedalia, Mo.
Ser. July 5, 1947 D. U. 1923

Petal Soft—VI—C—520,619
A. W. Curtis Jr., dba A. W. Curtis Labs., Detroit, Mich.
Ser. Nov. 10, 1947 D. U. Sept. 19, 1946

PHC—VI—H—548,969
Lewis Bros., Inc., N. Y., N. Y.
Ser. Feb. 6, 1948 D. U. Oct. 1, 1947

Pinedle—VI—D—506,138
Sunshine Products Co., Seattle, Wash.
Ser. Oct. 17, 1947 D. U. Jan. 15, 1937

Pin-Up—VI—C—524,818
Anatole Robbins, Inc., Los Angeles, Cal.
Ser. Mar. 8, 1948 D. U. Dec. 1, 1943

Pond's—VI—C—552,489
Pond's Extract Co., N. Y., N. Y.
Ser. Mar. 19, 1948 D. U. 1846

Poster Red—VI—C—523,778
Richard Hudnut, N. Y., N. Y.
Ser. June 7, 1947 D. U. Apr. 24, 1947

Poudre Super Dulci—VI—C—538,539
Guerlain Perfumery Corp., N. Y., N. Y.
Ser. Oct. 21, 1947 D. U. 1912

Precious Amber—VI—C—512,117
Dorothy Gordon, dba Dallwood-Keldon Labs., Hollywood, Cal.
Ser. Oct. 27, 1947 D. U. Oct. 14, 1936

Radium—IV—A—522,714
George C. Romberger, dba The Radium Hand Soap Co., Seattle, Wash.
Ser. Jan. 19, 1948 D. U. Nov. 1920

Rainbow—IV—A—519,259
Columbia Ribbon & Carbon Mfg. Co., Inc., Glen Cove, N. Y.
Ser. Mar. 19, 1947 D. U. Dec. 27, 1937

Red Mill—IV—A—552,294
M. Werk Co., St. Bernard, Ohio
Ser. Mar. 18, 1948 D. U. May 1, 1935

Rose Lip Bengale—VI—C—538,538
Guerlain Perfumery Corp., N. Y., N. Y.
Ser. Oct. 21, 1947 D. U. 1921

Royal Bain De Campagne—VI—AB—(And Des.) 547,698
Caron Corp., N. Y., N. Y.
Ser. Jan. 22, 1948

Salomint—VI—K—539,761
Salomint Labs., Cleveland, O.
Ser. Oct. 31, 1947 D. U. Oct. 20, 1947

Santa Maria—IV—A—516,672
Chicago Sanitary Products Co., Chicago, Ill.
Ser. Apr. 12, 1948 D. U. Sept. 1935

Santiseptic—VI—CK—548,561
Floyd N. Averill Jr., dba Santiseptic Co., Portland, Ore.
Ser. Feb. 2, 1948 D. U. Aug. 29, 1908

Saratoga—IV—A—528,005
Procter & Gamble Co., Cinn., O.
Ser. July 5, 1947 D. U. Dec. 1927

Sattay—VI—A—535,959
The Hennafoam Co., N. Y., N. Y.
Ser. Sept. 27, 1947 D. U. Sept. 15, 1947

Scan—IV—A—544,221
The Theobald Industries, Kearny, N. J.
Ser. Dec. 12, 1947 D. U. Nov. 26, 1947

Scarlet Glow—VI—C—521,133
Richard Hudnut, N. Y., N. Y.
Ser. Apr. 22, 1947 D. U. Mar. 6, 1947

Scat—VI—D—552,897
Synco Products Co., Inc., dba Synco Products, Chattanooga, Tenn.
Ser. Mar. 24, 1948 D. U. Jan. 12, 1948

Sheer-Loads-Of-Suds—IV—A—494,428
Detergent Products, Inc., Phila., Pa.
Ser. Jan. 8, 1946 D. U. Nov. 8, 1945

Simply Pink—VI—C—558,446
Harriet Hubbard Ayer, Inc., N. Y., N. Y.
Ser. June 4, 1948 D. U. Mar. 24, 1948

Sirocco—VI—BC—530,209
Lucien Lelong, Inc., Chicago, Ill.
Aug. 1, 1947 D. U. June 29, 1934

Skin Bracer—VI—C—543,209
Mennen Co., Newark, N. J.
Ser. Dec. 3, 1947 D. U. June 1931

Softress—VI—A—513,286
Andrew Jergens Co., Cinn. O.
Ser. Nov. 28, 1947 D. U. Oct. 28, 1946

Sophisti-Creme—VI—C—548,818
Richard Hudnut, N. Y., N. Y.
Ser. Feb. 5, 1948 D. U. Oct. 20, 1947

Smile Shave—IV—I—547,498
Unek Products Co., Inc., Oconomowoc, Wis.
Ser. Jan. 19, 1948 D. U. Oct. 24, 1947

Sno White—VI—T—530,360
Alva Tinsley, dba Snow White Labs., Deemer, Miss.
Ser. Aug. 4, 1947 D. U. Feb. 1, 1932

Snow White—VI—C—520,761
Morton Mfg. Corp., dba Snow White Products Co., Lynchburg, Va.
Ser. Dec. 18, 1947 D. U. Nov. 11, 1946

Sulfasol—VI—H—523,693
M.D. Lab., Muskogee, Okla.
Ser. June 6, 1947 D. U. Mar. 1946

Tact—VI—D—533,423
Vick Chemical Co., N. Y., N. Y.
Ser. Sept. 4, 1947 D. U. June 19, 1947

Taffeta-By Minx Modes—VI—B—506,-382
R. Lowenbaum Mfg., St. Louis, Mo.
Ser. July 27, 1946 D. U. July 1, 1946

Tear Of The Olive Face Lotion—VI—C—557,982
William Saviou, Warren, O.
Ser. Apr. 16, 1948 D. U. Mar. 22, 1948

Tempest—IV—A—535,974
Lucien LeLong, Inc., Chicago, Ill.
Ser. Sept. 27, 1947 D. U. Sept. 10, 1947

Thoro-Kleen—VI—K—536,367
The Fair, Chicago, Ill.
Ser. Oct. 1, 1947 D. U. June 1, 1937

Too Lovely For Words—VI—B—512,-227
The Armand Co., Des Moines, Iowa
Ser. Nov. 8, 1946 D. U. June 28, 1946

Trublond—VI—A—552,526
Whitehall Pharmacal Co., N. Y., N. Y.
Ser. Mar. 18, 1948 D. U. Mar. 9, 1934

Twain—VI—BC—548,959
Glendale Toiletries, Inc., Chicago, Ill.
Ser. Feb. 6, 1948 D. U. Jan. 5, 1948

Twayne—VI—C—549,307
Twayne Cosmetic Co., Passaic, N. J.
Ser. Feb. 10, 1948 D. U. Dec. 18, 1947

Twintype—by La Cross—VI—CE—553,-909
Schnefel Bros., Corp., Newark, N. J.
Ser. Apr. 5, 1948 D. U. Feb. 5, 1948

Tussy—IV—A—554,314
Lehn & Fink Prods., Corp., Bloomfield, N. J.
Ser. Apr. 10, 1948 D. U. Sept. 12, 1939

Un Ami Vient—VI—C—542,937
Guichard-Perrachon & Cie., Etablissements Economiques Du Casino, St. Etienne (Loire) France
Ser. Dec. 2, 1947 D. U. Aug. 9, 1946

Undelex—VI—T—532,680
Brunswick Labs., Inc., Chicago, Ill.
Ser. Aug. 28, 1947 D. U. May 1947

Valoy—IV—A—537,684
Salomon Freres, SARL, Pantin, France
Ser. Oct. 13, 1947

Velva Complexion Film—VI—C—551,-217
Eliz. Arden Sales Corp., N. Y., N. Y.
Ser. Mar. 5, 1948 D. U. Jan. 20, 1948

Villareal—VI—BCHK—532,890
Villareal Societe Cherifienne De Parfums, Casablanca, Morocco
Ser. Aug. 29, 1947

Wild Azalea—VI—B—506,739
Kay Daumit, Inc., assignor to Kathryn, Inc., Chicago, Ill.
Ser. Aug. 2, 1946 D. U. July 24, 1945

Wilt—IV—M—537,762
Wilt Inc., Long Island City, N. Y.
Ser. Oct. 13, 1947 D. U. 27, 1947

Woodbury—VI—CIK—549,203
John H. Woodbury Inc., Cinn., O.
Ser. Feb. 9, 1948 D. U. Jan. 1, 1891

Wonderful—VI—B—506,529
Clara Hirsch, dba Rocca, Paris, Fr.
Ser. July 30, 1946 D. U. May 25, 1897

Yanky Clover—VI—BC—520,872
Richard Hudnut, N. Y., N. Y.
Ser. Apr. 17, 1947 D. U. July 1944

Yule Love—VI—B—517,235
Lillian Hunter Brownback, dba Qui Sait Co., Linfield, Pa.
Ser. Feb. 10, 1947 D. U. Aug. 1946

Cod Liver Oil

(Continued from page 173)

The United States produces only 3 or 4 per cent of the cod liver oil required and this is mainly poultry grade. We are, therefore, almost entirely dependent on foreign sources of supply. But considerably less crude cod liver oil is used here than was the case a decade ago.

There are several types of vitamin D and cod liver oil contains primarily the D_3 form. Vitamin D_3 has been found most beneficial in poultry and other animal feeds. The duPont company synthesized vitamin D_3 before the war and this form is now largely used to fortify poultry feed instead of crude cod liver oil. This naturally makes available more cod liver oil for destearinization and so increases the supply of medicinal non-freezing oil at a time when a good part of the market for medicinal oil has been lost to vitamin concentrates.

During the war various other substitutes such as sardine oil, menhaden oil and vegetable oils were fortified with synthetic vitamins for poultry and other prepared animal feeds. These are still used extensively.

The lack of fats and oils in most foreign countries has materially aided the maintenance of high prices by supplying a large outlet for Norwegian oil and production from other sources. Large quantities of this oil were used abroad for extraction of fats to produce oleomargarine as a substitute for butter. The fat situation in Europe, however, has so greatly improved that this factor alone should have a decided bearing on future cod liver oil prices.

The greatest single development likely to eventually influence the market position of cod liver oil is the competition of the multiple vitamin capsule. Pharmaceutical houses find it more profitable to promote their vitamin preparations—which they advertise extensively—than to sell bottled, natural cod liver oil in a very competitive market.

The popularity of cod liver oil probably could be revived by an extensive advertising policy directed to the general consuming public to acquaint them with the fact that the oil is an inexpensive and wholesome source of vitamins A and D, and also inform them that the oil is now refined so well that it has lost most of its objectionable features and is really quite palatable. The new refined oil is said to be bland and without the bad taste that previous generations remember to its detriment.

Barring certain imponderables, cod liver oil is expected to decline in price. The Marshall Plan may enable cod liver oil to be distributed free to underprivileged children in Europe and elsewhere. If large quantities of oil are eventually purchased with U. S. Government funds for free distribution it would strengthen the market considerably.

But discounting such a development a normal production of cod liver oil from the fishing which started in Norway in January would be equivalent to an overproduction because of declining consumption in the United States and elsewhere and prices should decline accordingly.

Skin and Scalp Claims

(*Continued from page 161*)

The Administration objects to the word "quinine" on preparations known as hair tonics because many such preparations contain no quinine, and because there is no scientific evidence that if quinine is present, it adds to the effectiveness of the preparation.

While some claim that dandruff is caused by the germ, Pityrosporon ovalie, others contend that the scales of dandruff result from minor irritations of the scalp which cause a scaling off of its superficial layers, while there is still another group which contends that dandruff scales are the result of a mixture of oil from the scalp and dust from the air. However, with respect to dandruff, the Food and Drug Administration wants representations in labeling restricted to the value of the product in removing loose dandruff or scales of dandruff.

The Federal Trade Commission proceeded against a product advertised for dandruff caused by the germ, Pityrosporon ovalie. The product was an antiseptic when used as directed, and after a trial which lasted for more than two years, the Commission dismissed the complaint. Similar cases against other antiseptics were likewise dismissed. This illustrates a case of conflict between the two Government enforcement agencies. The Food and Drug Administration objects to use of the word "dandruff" unless qualified to refer to "loose dandruff" or "scales of dandruff," whereas the Federal Trade Commission will allow broader reference to the condition.

Various manufacturers of skin and scalp preparations were prohibited in Stipulations or Cease and Desist Orders from using the following words or representations for advertising their products:

". . . scalp tonic will act as a competent treatment or effective remedy for hair troubles, itching scalp or falling hair unless limited to its cleansing action."

"Prevent the loss of hair, cure dandruff regardless of the cause, stimulate the growth of hair or act as a tonic to the hair."

"Penetrate into the scalp pores or hair follicles; loosen or help loosen dust, dirt, grease, dandruff or any other foreign substance embedded in the scalp pores or hair follicles."

"Prevent dandruff or falling hair."

"A competent treatment for eczema;" "an effective treatment for itching unless representations be limited to indicate itching commonly known as scabies."

"Goes deep into the skin tissues or pores to remove dirt;" "thoroughly cleanses out the pores."

"Has any therapeutic value in the treatment of psoriasis, insect bites, abrasions, or skin irritations in excess of having a limited value in the treatment of bites of non-venomous insects or in the relief of minor abrasions and skin irritations."

"When used in conjunction with psoriasis, eczema or any other external skin irritation has any therapeutic effect except to the extent that its use may temporarily relieve the itching incident thereto or aid in the removal of loose epidermic scales caused thereby."

"Imparts firmness or beauty to the face or neck, lifts, rebuilds or strengthens the muscles, tissue or removes double chin or face lines."

"A cure or a remedy for or has therapeutic value in the treatment of itching scalp, eczema, better conditions which cause falling hair or dandruff except insofar as its use would facilitate the mechanical removal of the loose scales of dandruff."

"A cure or remedy for eczema, poison oak or poison ivy or that it has any therapeutic value in the treatment thereof in excess of affording relief from the symptoms of itching."

"A cure or remedy for eczema or that it has any therapeutic value in the treatment thereof in excess of affording relief from the symptom of itching."

"Cure or remedy for pimples or hives or that it has any therapeutic value in the treatment thereof in excess of affording relief from the symptom of itching."

"Has any therapeutic value in the treatment of any disorders of the skin caused by internal or systemic conditions in excess of affording relief from the symptom of itching."

"Has any therapeutic value in the treatment of blotches or lesions appearing on the skin when due to systemic or functional conditions."

"Is a cure or remedy for pimples, acne, surface ulcers, skin bruises, insect bites, burns from heat and chemicals, poison ivy and sunburn or that it has any therapeutic value in the treatment of said diseases or conditions."

"Serve as a food for or nourishment for human skin, muscles or tissues."

"Prevent crow's feet and wrinkles and revitalize the skin tissues;" "rebuild worn out cells;" "restore youth to dry, lined, wrinkled skin."

A Cease and Desist Order prohibited a manufacturer from advertising that his treatment will:

"Tighten the relaxed contours of the face or stimulate lagging circulation or have any effect upon circulation in excess of temporarily stimulating local circulation.

"Clear the pores of dirt and other accumulations, provided, however, that the respondents are not hereby prohibited from representing that such cream may remove superficial accumulation of dirt from the pore openings.

"Remove, counteract, or fortify against the lines or wrinkles in the skin; provided, however, respondents are not prohibited hereby from representing that an emollient cream which lubricates the skin will aid in smoothing out lines caused solely by dryness of the skin."

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Progress in Hair Coloring

(Continued from page 231)

is a reddish, diffuse stain that seems quite different chemically from the brown.

As there are numerically less redheads than brunettes, and as oxidation colors tend to fade to red rather than to drab, it may be argued that the brown, granular pigment is the more important. This pigment is believed to be related to, if not identical with, melanin of the skin, and melanin is believed to result from oxidation of the amino acid "dopa" and/or tyrosine. "Dopa" is dihydroxyphenyl alanine including the catechol nucleus, whereas tyrosine is p-hydroxyphenyl alanine.

The exact mechanism of natural pigment formation is not known. Why and how its granules form and seem to arrange themselves as they do in elongated bodies oriented parallel to the hair shaft is equally unexplained. They do not seem to be enclosed within any membrane identified with any cigar shaped cells reported to constitute keratin. In fact our own studies show that:

1. Pigment granules, without other apparent change can be washed or leached out of hair under suitable treatment.
2. Though contained in and throughout the cortex they seem to be independent bodies occluded in a coherent mass of extruded—though chain-oriented—hardened plastic material shown in Figure 15. It is as though pigment granules were present in the liquid within the silk pouch of a spider or silkworm and that the suspended solid became imbedded within the wet fibers as they were squeezed from or pulled from the spinnerets.
3. Their distribution within the shaft is never uniform nor symmetrical, but appears as a totally random pattern.
4. Though granule sizes are generally of the same order in any one hair, there is a wide range of both diameter and length and of ratio of diameter to length.

Future Types of Colorings for Hair

Future colors may be penetrating or surface coating. They may be adsorbed or bonded by vehicles. They may be completely fast for the life of the hair shaft or more or less removable. Whatever their nature, they must conform to certain criteria to be generally acceptable to women or to men.

1. The effect of the use of coloring must be to duplicate the appearance of natural hair or differ *widely* therefrom.
2. The color, if fanciful, must be alterable or removable.
3. Its presence must not conflict with general hairdressing practices. Shampooing, permanent waving, and setting, as well as sun- and sea-bathing,—a host of experiences to which

hair is subjected—must not adversely affect the color.

4. The uniform application of hair coloring is at best a tedious undertaking. The coloring should be capable of simple application and yet be immune to a wide variety of abuses in application.

Although most of the vital criteria are met by oxidation colors, this class of dyes has certain deficiencies. The dyes may be allergenic; their application may leave the hair streaked and unsightly; they may not be completely removed after once being applied; the

FIGURE 15
Longitudinal Section of Sliced Hair, Magnification 670X

interval between applications permits the growth of unsightly gray hair.

Until these deficiencies are overcome, oxidation colors, the most promising of hair colorings thus far developed, cannot be considered completely satisfactory.

BIBLIOGRAPHY

1. Monnet and Company, F. P. 158 558 (1883).
2. Erdmann, Ernst, D.R.P. 47 349, April 29, 1889.
4. Bandrowskie, E., *Monatshefte for chemie*: 10: 123 *Berichte* 27: 480 (1894).
5. Hofmann, A. W., *Proc. Roy Soc. London* 12: 640; *J. Chem. Soc.* (London) 1863: 422.

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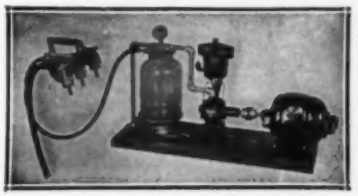

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Inhalation Therapy with Antibiotics

(*Continued from page 168*)

of medication, an outstanding advantage of penicillin dust inhalation is the simplicity and compactness of the requisite powder inhalers. One such device consists of a molded plastic discharge chamber, a detachable mouth piece and an alternate molded nose piece. These last permit oral or nasal inhalation as indicated for optimal results. With this small, compact inhaler, the patient can be given 100,000 units of pénicillin in less than ten minutes. Moreover, the penicillin dust in the inhaler is distributed throughout the respiratory tract by the pressure changes created by the subject's natural breathing, without the need for hand bulbs or similar apparatus. Carried by the inhaled air, the antibiotic dust is deposited on the mucosa, in direct contact with any susceptible bacteria that may be present.

Optimum doses of penicillin administered by inhalation methods have not been established fully. The quantities required vary not only with the severity of the condition being treated, but also, in many cases, with the type of equipment or inhaler being used. Barach and his associates[3-15], for example, generally employ penicillin in a concentration of 50,000 units dissolved in 1 cc. of physiological saline. Half this quantity of penicillin in isotonic saline solution was given by Segal and Ryder[25] at three-hour intervals for six to eight doses daily in the treatment of various respiratory conditions. Similar concentrations were employed as the adult dose by Vermilye,[13] but 50,000 units per cc. was frequently used. In the series of cases studied by Prigal and his co-workers,[5] the total dosage administered in a course of treatment varied from 500,000 to 1,500,000 units. For treating upper respiratory infections with penicillin dust, the recommended dose is 100,000 units one to three times daily, depending on the severity of the infection.

The efficiency of antibiotic aerosols has become well established and inhalation therapy with these agents is finding wider utilization in a growing number of conditions. As recently pointed out in a report by one important group of investigators,[26] such therapy has been employed successfully in patients with the following conditions: acute and infectious sinusitis; chronic sinusitis associated with bronchiectasis; acute bacterial infections, such as laryngitis, tracheobronchitis and laryngotracheabronchial edema; bronchitis and bronchial asthma associated with definite bacterial infections bronchiectasis; lung abscess; pulmonary infections due to the streptococcus, staphylococcus or penicillin-susceptible strains of *Klebsiella pneumoniae*; pulmonary infections secondary to pulmonary emphysema, lung cysts or infarcts; unresolved pneumoic infections; pneumonitis secondary to foreign bodies and tubercular infections in the lung; and staphylococcal bronchopulmonary infections associated with pancreatic disease in children. This kind of therapy has been proven to be a valuable preoperative and postoperative medication in surgery of the upper and lower respiratory tract.

The value of antibiotics, particularly penicillin, in the treatment of these conditions is well attested by the many reports in the medical and research literature. These same sources, however, are in disagreement regarding the worth of penicillin aerosols in the prevention and treatment of the "common cold." For example, Segal and his associates[1,7] are of the opinion that penicillin aerosol therapy should not be employed for the management of this condition. They point out that this infection generally runs a self-limited course despite all therapy. They also stress the fact that here is always the risk of creating a penicillin-resistant strain of organisms or of sensitizing the individual after repeated or prolonged use of penicillin aerosol therapy.

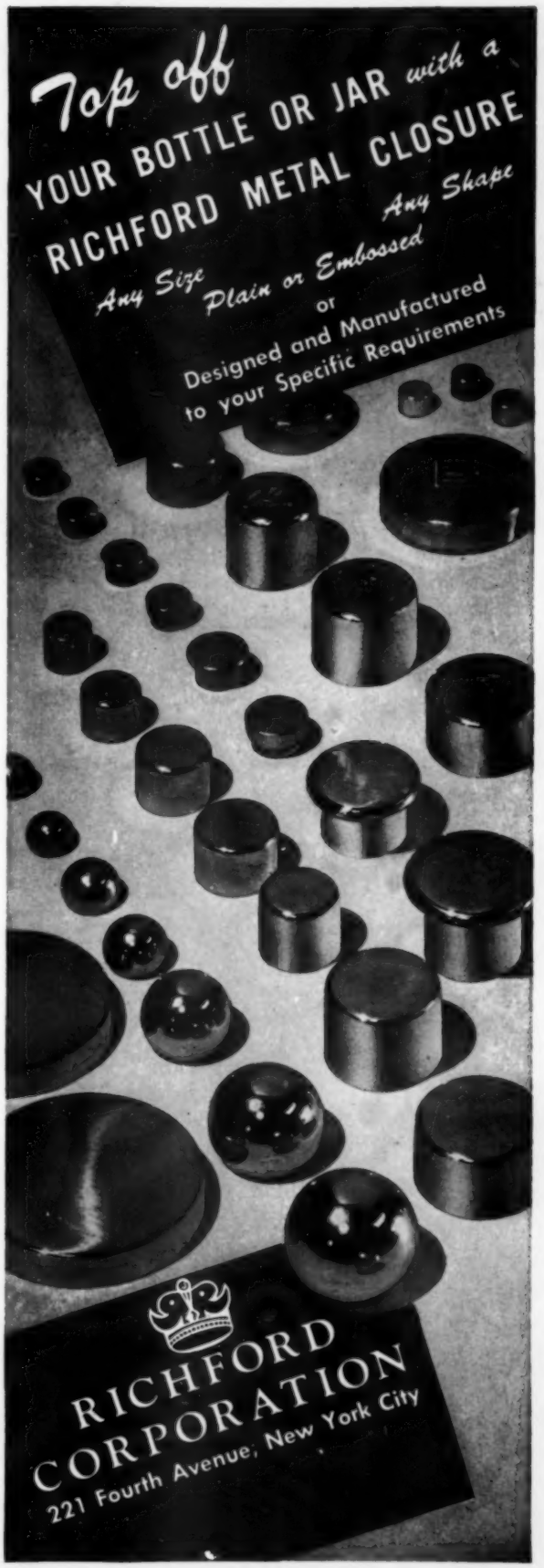
On the other hand, investigators like Krasno, Karp and Rhoads[9] found that the common cold syndrome of acute rhinitis, lacrimation, nasopharyngitis and general malaise responded to inhalation therapy with penicillin dust. Of those treated, 42 per cent were considered cured and 38 per cent were judged as "3 plus" improved. They noted that in many cases the penicillin dust seemed to exert a vasoconstrictor action on the mucous membrane of the nose and throat. Patients said that they could breathe more freely through the nose and that the stuffiness and congestion of the acute rhinitis often improved immediately after treatment.

As was noted previously, absorption of penicillin into the blood via the respiratory tract may be of definite importance in the treatment of systemic infections. With the tent or breathing box method, Prigal[4] found that the inhalation of penicillin-propylene glycol aerosols resulted in excellent therapeutic blood levels of penicillin which were maintained for five to six hours. Hence, he pointed out, such aerosols can be used, not only for the treatment of local bronchopulmonary infections, but also for systemic infections and infections elsewhere in the body.

Application of these principles, as well as the elimination of painful injections, is evident in the report of Taplin and Thompson[27] on the inhalation of micronized penicillin for gonococcal infections. They noted that aerosol penicillin inhalations gave results similar to intramuscular injections of penicillin solutions. In their study, 18 of 25 patients with acute gonorrhea, treated with inhalations of micronized penicillin, were cured clinically and bacteriologically. Three others were cured clinically, but could not be followed-up for bacteriological examination. The remaining four patients were classed as failures due to mechanical factors. Retreatment of these four patients resulted in three cures and one failure.

It has been pointed out[28] that nearly all organisms infecting the respiratory tract are sensitive to either penicillin or streptomycin. Although penicillin holds the dominant position in inhalation therapy with antibiotics, there is growing evidence of the value of administering streptomycin by this route. Difficulties in obtaining this antibiotic have hampered research on its use, but this situation is being remedied rapidly.

From the literature it appears evident that streptomy-



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cin may prove to be of value in infections of the lungs with Friedlander bacillus, Hemophilus influenzae, and tubercle bacilli. According to Segal and his coworkers,[7] the combined intramuscular and aerosol routes may prove most efficacious in such cases. Before instituting aerosol therapy, due consideration should be given to the possible appearance of streptomycin resistant strains of organisms. It is also noted that streptomycin also has toxic potentialities which may possibly be attributed to the impurities present in some commercial preparations.

Several reports have been published on the administration of streptomycin by inhalation. Olsen,[29] for example, employed a streptomycin aerosol on a group of patients that did not show suitable reduction in the volume of sputum. A total of 500,000 units of streptomycin, dissolved in 20 cc. of physiological saline, were nebulized each day. In each of the nine cases in which streptomycin aerosol was used, the Gram-negative bacteria disappeared rapidly from the pulmonary secretions, and the volume of sputum was immediately reduced. Although none of the patients became entirely sputum-free, the remaining sputum lost its purulent character.

More recently, in their investigations on the prevention of postoperative pulmonary infections, Taplin, Cohen and Mahoney[28] used streptomycin in 40 cases, preoperatively and postoperatively. The streptomycin was administered by inhalation in the micropowdered form; the dosage being 100,000 units three times per day for two days before and after operation. None of these patients developed pulmonary complications following surgery. Very interesting was the finding that in 25 per cent of these cases, the cultures from the mouth and nose were sterile following streptomycin aerosol therapy.

Krasno, Karp and Rhoads[9] also tested the efficacy of inhaled penicillin dust in five patients. Pointing out that this small number of cases does not permit a clinical evaluation, they did observe that the Gram-negative bacteria disappeared from the sputum in all instances.

Mixtures of penicillin and streptomycin provide a much broader range of antibacterial action than either alone. It is not surprising, therefore, that such combinations should find employment in the treatment of more resistant conditions. In his more recent report Olson[30] points up the superiority of such combinations in the treatment of bronchiectasis. In these cases, the results of nebulization therapy were judged satisfactory if the daily volume of purulent secretion was decreased by 75 per cent or more. Thus slightly more than half of the patients treated with penicillin aerosol alone showed a 75 per cent reduction in volume of sputum. In contrast, of 20 patients treated with a combined penicillin and streptomycin aerosol, 18 obtained satisfactory results.

Like Olsen, other workers[28] have stated that penicillin may be safely combined with streptomycin aerosol. In cases of respiratory infection which do not respond to inhalation of penicillin, or in which gram-negative

organisms have been demonstrated, Davis[31] recommended that streptomycin be combined with the penicillin. With this combined therapy, be obtained improved results in treating patients with bronchiectasis Taplin and Bryan[32] found that mixtures of penicillin and streptomycin temporarily removed practically all bacteria from the respiratory tract. They also reported that many cases of asthma were relieved for one to eight weeks by 7 to 14 days of penicillin-streptomycin therapy. In another report, Taplin and his associates[28] expressed the opinion that prophylactic intrapulmonary administration of micronized penicillin and streptomycin mixtures should be especially beneficial in major abdominal emergency conditions with acute concurrent infections of the respiratory tract.

Sometimes other medicinal agents are combined with penicillin aerosols to provide a better or more rounded therapeutic effect. As mentioned above, it has been suggested[33] that a vasoconstrictor, like epinephrine, be added to penicillin solutions for aerosolization with the idea of shrinking the mucous membranes to promote diffusion of the inhaled mist and also to prolong the effectiveness of the antibiotic.

Also noted is the conjunct use of antihistaminic agents to combat sensitiveness to penicillin or to decrease the possibility of undesired allergic reactions. It was on such a basis that Taplin and his associates[28,32] employed, in 320 cases, a mixture of micro-powdered penicillin and dextrose, plus one per cent of diphenhydramine hydrochloride ("Benadryl").

In view of the results obtained with antibiotic aerosols, it is not surprising that workers in the field of inhalation therapy should explore the possibilities of other substances. One group of workers[32] is studying the effect of inhaling various micronized antihistaminic agents, vasoconstrictors and powdered cough mixtures. Their preliminary results have been better than were anticipated.

Another group of investigators[4,5] have found that aminophyllin can be administered successfully by the aerosol method. This is of special value in asthma bebecause it may be effective even when intravenously administered aminophyllin gives no results. Ammonium chloride, which is also of value in asthma, likewise can be given by inhalation. Where bronchiectasis or bronchitis is present with asthma, it has been found that preliminary treatment with a mixed aerosol of aminophyllin and ammonium chloride makes the succeeding penicillin inhalation therapy more effective.

BIBLIOGRAPHY

1. Segal, M. S.: Modern Med. 14:63, April, 1946.
2. Bryson, V., Sansone, E. & Leskin, S.: Science 100:33, 1944.
3. Barach, A. L. et al: Ann. Int. Med. 22:485, 1945.
4. Prigal, S. J.: Ann. Int. Med. 28:814, 1948.
5. Prigal, S. J., Morganbesser, L. J. & McIntyre, F. P.: J. Allergy 18:325, 1947.
6. Morse, F. W.: J. A. M. A. 132:272, 1946.
7. Segal, M. S., Levinson, L. & Miller, D.: J. A. M. A. 134:762, 1947.
8. Abramson, H. A.: Ann. Allergy 4:440, 1946.
9. Krasno, L., Karp, M. & Rhoads, P. S.: J. A. M. A. 138:344, 1948.
10. Segal, M. S.: J. A. M. A. 132:878, 1946.
11. Mutch, N. & Rewell, R. E.: Lancet 1:650, 1945.
12. Barach, A. L., Rumsey, C. C., Jr., Soroka, M. & Roder, D.: New York State J. Med. 47:1498, 1947.
13. Vermilye, H. N.: J. A. M. A. 129:250, 1945.
14. Bryson, V. & Grace, E. J.: New England J. Med. 237:683, 1947.
15. Garthwaite, B., Barach, A. L. Levenson, E. & Rader, D.: Am. J. Med. 3:261, 1947.

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16. Main, R. J.: Ind. & Eng. Chem., Anal. Ed. 12:117, 1940.
17. Glusker, D. G.: Science 105:437, 1946.
18. Prigal, S. J.: J. A. M. A. 131:398, 1946.
19. Prigal, S. J., McGavack, T. H., Speer, F. D. & Harris, R.: J. A. M. A. 134:933, 1947.
20. Segal, M. S. & Beakey, J. F.: Current Med. Digest, Oct. 1948, p. 42.
21. Finke, W.: Amer. Proc. 1:643, 1947.
22. Krasno, L., Karp, M. & Rhoads, P. S.: Science 106:248, 1947.
23. Krasno, L., Karp, M. & Rhoads, P. S.: Ann. Int. Med,. 28:607, 1948.
24. Taplin, G. V. & Bryan, F. A.: Science 105:502, 1947.
25. Segal, M. S. & Ryder, C. M.: New England J. Med. 236:132, 1947.
26. Segal, M. S., Levinson, L. & Beakey, J. F.: Dis. of the chest 14:386, 1948.
27. Taplin, G. V. & Thompson, H. T.: Am. J. Syphilis, Gonorrhea & Ven. Dis. 32:124, 1948.
28. Taplin, G. V., Cohen, S. H. & Mahoney, E. E.: J. A. M. A. 138:4, 1948.
29. Olsen, A. M.: Proc. Staff Meet. Mayo Clin. 21:53, 1945.
30. Olsen, A. M.: J. A. M. A. 134:947, 1947.
31. Davis, D.: Trans. Am. Acad. Ophth. & Otolaryng., March-April, 1948, p. 273.
32. Taplin, G. V. & Bryan, F. A.: Ann. Allergy 6:42, 1948.
33. Sturner, F. X.. J. A. Ph.A., Pract. Ed. 7:38, 1946.

50,000 Ways To Sell Cosmetics

(*Continued from page 219*)

that so many variations in promotional selling methods arise.

In cosmetic selling particularly, it is widely believed, outside the trade, that these products are purely the creatures of advertising, that they exist and succeed only because the consumer, persuaded by wide and persistent advertising, demand them by naming names.

It is true that a limited number of brand names, sold largely through mass distribution in drug stores and chains, direct or through the wholesaler, and also a well-defined variety store group, find their basic and principal means of continued existence through heavy sustained advertising. But by a very large majority, the members of the cosmetic business succeed by promotional skill, with advertising as a helpful, valuable supplement. The record each year of perfume and cosmetic advertising appropriations is startling evidence that this is true. The proof of the pudding was even more convincingly evidenced last year when drastic cuts in selling expense by many companies severely reduced consumer advertising, but left the demonstration system virtually unimpaired.

Promotions in the store, in many and varied forms, give many added ways to sell perfumes and cosmetics. The basis of the promotions may be the demonstrator, the distribution based on specialization, retail franchise, or be vertical or horizontal. In each case the key to success is the power or ability of a reputable, successful store to build large volume sales and consumer preference for a perfume or cosmetic which the store favors. These sales, and the reputation which grows with sales, may result from the skilled selling of the demonstrator, from favorable store display, extensive sampling, telephone and mail selling, cooperative newspaper advertising and other sales expansion methods available in any one store. All or many or other various combinations may be used.

This industry has successful companies which may be said to have been built on the demonstration system (opened or closed) alone, with little evidence of any other kind of promotional ability, just as there are successes which can be attributed to heavy advertising and little else. But in between are such variations as that used to build the openly acknowledged, most profitable perfume operation today and the universally admired

veil of illusion

Today's great cosmetic business is based on the principle of drawing the flattering veil of illusion to create the impression of beauty.

To attain success in creating such illusion through the products that achieve it requires a special combination of chemical knowledge, skill, experience and imagination on the part of the cosmetic chemist.

We have applied these abilities for over 40 years to the requirements of our private brand customers and have brought tangible success to the business of illusion.

May we work with you and your product toward the same success?

KLINKER
MANUFACTURING COMPANY
9210 BUCKEYE ROAD • CLEVELAND 4, OHIO

Manufacturers of Private Label Cosmetics

treatment house whose consistent growth and success, like the perfume company, can be attributed, sales-wise, only to skilled store promotions.

Every successful perfume and cosmetic company has an individuality that is expressed fully as much in sales methods and distribution as in product, package or advertising. If we were to count and assess all these methods of selling, all the variations in distribution and all of the shades and kinds of promotion, there is little doubt that 50,000 would not be too large a total.

F.T.C. Cosmetic Rules

(Continued from page 159)

Industry Product as and for the Product of a Competitor; Rule 9. Defamation of Competitors or Dispargement of their Products; Rule 10. Commercial Bribery; Rule 11. Procurement of Competitors' Confidential Information by Unfair Means and Wrongful Use Thereof; Rule 12. Inducing Breach of Contract; Rule 13. Use of Lottery Schemes, etc.; Rule 14. Combination or Coercion to Fix Prices, Suppress Competition, or Restrain Trade; Rule 15. Unfair Threats or Infringement Suits; Rule 16. Selling Below Cost.

The main controversy, if there is any, centers around Rule 1 and its method of proportionalizing demonstrators. Questions naturally arise as to the interpretation of certain wording. As an example, in the statement, ". . . in the case of any such dealer or customer who cannot feasibly utilize demonstrators in his store, or does not choose to accept demonstrators," there is no indication as to who decides that the dealer cannot "feasibly use demonstrators." Naturally many retailers themselves know that they cannot use demonstrators, but can the manufacturer or distributor make the decision with respect to any dealer?

Some manufacturers have raised the question if it is not unfair to turn over to stores not using demonstrators the amount due them for substitute services, when they believe that the dealer might pocket a large part or all of this money and perform the services. Such manufacturers have not read carefully, for the provision in the rule covering the furnishing of these substitute services ends with the words "lawfully used." This would seem to mean that the retailers are bound to perform the services for which the manufacturer gives them payment. It does not state specifically that the manufacturer must check the performance of these services, but it certainly appears that this is the manufacturer's responsibility. Certainly the manufacturer would not pay out money for anything else which he did not receive, and, therefore, he could not very well defend his neglect in failing to check the receipt of services from retailers whom he pays in discounts or in any other way.

Some manufacturers are asking themselves just what they are going to do with certain very large buyers, such as mail order catalog houses who sell not only

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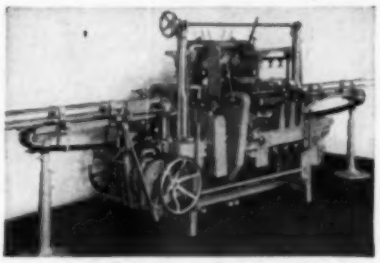
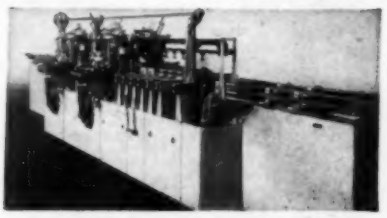


The Model 65 BEE-LINE delivers 30 to 65 labeled containers per minute.



The Model 120 BEE-LINE delivers from 60 to 120 containers per minute.

The WORLD **BEE-LINE** Labeler conducts your glass containers, however light or delicate, straight down a bee-line without traffic jams, detours or collisions. Gently they are dressed up and ready to go out in public and do you proud, with body labels, front or front-and-back, and neck labels if desired, precisely, firmly and smoothly applied to a wide range of container sizes and shapes.

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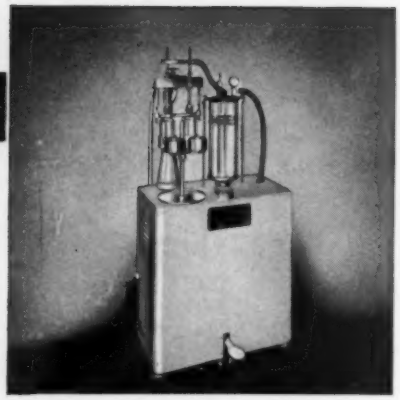

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The most comprehensive filler for hand-fed operation. Interchangeable filling stems for any liquid or semi-liquid. Interchangeable parts for various size containers. Fills from any size storage container. Portable, motor equipped with cord and plug.

BOTH are 2-Tube Machines and handle two containers at a time. Both are fully automatic in operation except for placing and removing of containers (two at a time) requiring only ordinary skill for fast efficient operation.

Both machines are portable; can be used separately or in combination to clean and fill 50 to 75 gross a day. Write for the "Model B-2" and the "E-Z" Bulletins.

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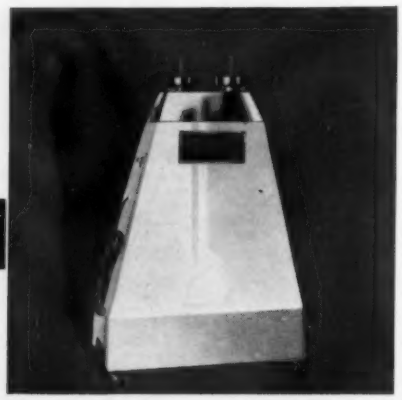

THE E-Z TWO-TUBE CLEANER

Cleans 15 to 30 containers per minute by blasting with compressed air. Supplied portable with compressor and motor with cord and plug or with air filter for connection to your compressed air line.

by mail, but also in retail stores throughout the country. The volume of sales of certain of these houses is said to be so high that the manufacturers do not know these outlets can possibly use up the amount of demonstrator services or any other services to which they would be entitled. This brings up the specified responsibility of the manufacturer to furnish enough types of services so that all of his customers will be able to select one or more services which he can use to the mutual benefit of the customer and the manufacturer. It also brings up the question of whether or not a manufacturer will be permitted to include in his list of services, a particular service that can be used only by a type of customer of which there are so few, that the creation of such a particular service for them alone might be considered discrimination.

It is possible to offer a service for mail order houses which would pay for advertising or display space in their catalogs. Such a service could also be used by a very large number of retailers—particularly department stores—who send out catalogs of many types, both large and small, at different times during the year. Apparently it up to manufacturers to create services which all of their customers can properly use. If this is not done then some customers will not be allowed the full amount available to them for performance of services, since the allowance cannot be given to the customer unless it is "lawfully used." And it is certain that the money is not "lawfully used," if it is merely pocketed with no services being performed.

Nowhere in the rules is any mention made of P.M.'s or push money, although this is a widely used promotion method. Perhaps this is merely to be considered one of the substitute services. The only substitute services specifically named are advertising allowances, payments for display space, merchandising aids.

The real crux of this entire rule is the requirement that manufacturers publish the list of services available for selection, the terms of each service, the percentage used to arrive at the amount of the allowances, and all other information pertinent to the matter. This information must be supplied to each and every customer of the manufacturer so that each one will know just what he is entitled to, and what he would be entitled to if his volume were larger or smaller. Such publication of the complete terms of the allowances available would tend to straighten out the whole matter more than any other one thing. For by such publication, the manufacturer exposes his plan to all his customers of various types, as well as to the Federal Trade Commission. If any of the customers of a manufacturer have any criticism of the plan as published, they can take these matters up with the manufacturer and have the reasons for the provisions explained to them, or in some instances, their criticism might be sound enough to convince the manufacturer that he should change his plan.

When a store earns enough in allowances to employ one demonstrator and part of a demonstrator, it would

be assumed that the rules of any manufacturer can cover the question of whether this additional allowance is to be applied to pay part of the salary of another demonstrator or whether it must be applied to substitute services. Perhaps some manufacturers will be willing to furnish demonstrator service by paying part of the salary of a demonstrator, while other manufacturers might specify that no demonstrator services are to be furnished unless the full salary of a demonstrator is earned by a dealer and is applied to demonstrator services. It would seem that such provisions could be made in the published terms of any manufacturer provided these provisions did not cause the plan to discriminate against any buyer. For instance such provisions as mentioned above would not be allowed if it resulted in only a very few dealers being able to employ demonstrators. It would seem perfectly proper to make any provisions regarding the furnishing of any of the services if these provisions worked out to the benefit of a very large majority of the customers and did not unjustly discriminate against any customer because his purchases are relatively small.

When the rules are promulgated in final form, manufacturers will have to study carefully their many accounts and draft their plan with a sharp eye on how the plan is going to work out for various types of outlets with varying degrees of purchasing power. Manufacturers cannot be expected to have perfect plans in all instances at the start. Probably much experience will be needed before any such plan is working smoothly in a number of instances. However, if the rules are promulgated in anything like their tentative form, they will provide a basis for conforming the industry with the interpretation by the Commission of the provisions of the Robinson-Patman Bill and other laws enforced by the Commission. The final rules will merely be the majority opinion of the five commissioners of these laws as applied to the cosmetic industry. Appeals from the provisions of these rules, when applied by the Commission in specific cases through the bringing of charges against a particular manufacturer, can always be made to the U.S. Circuit Court of Appeals and to the U. S. Supreme Court.

Canned Sutures

(*Continued from page 169*)

for several hours. Workers then fill the tubes halfway with antiseptic fluid and flame-seal them on rotary machines.

Now the tubes are placed to stand on end in the cans, six dozen to a container. The tubes are then completely covered with purple antiseptic fluid poured into the cans up to a line marked about a half inch from the top. Finally, the sealing operation is accomplished by a "double seamer," the machine developed by the can industry to guarantee an absolute seal to containers for food, liquids, and other products which need complete protection. Suture-test and tube-

KOMMON/ SCENTS!

Now that the professional critics have done with analyzing the recently departed 1948, a little amateur review should be in order. (An amateur, by active definition, is one who is bad enough to be a professional without the support of a union.)

•

Biggest surprise of the year was Harry S. Truman's election to the Presidency. The contest was so close, even Molotov conceded before Tom Dewey.

•

In baseball, the long-denied Philadelphia Athletics won everything but the American League pennant. Only in the closing games did they resemble chronic tail-enders. That was when the pitchers pitched, hitters hit and fielders fielded like their venerable manager, Connie Mack.

•

In motion pictures, Olivia de Havilland put insanity on a paying basis via "The Snake Pit." And Laurance Olivier proved that Great Britain has a very promising playwright by the name of William Shakespeare.

•

And '48 will be remembered as the year of jurisdictional strife in Congress, when legislators who were not on agriculture committees did such a wonderful job of popularizing Pumpkins. (This was surpassed by the election Poll Takers who grew thin eating crow.)

•

The year was also a distinct change for Tommy Manville, who kept his old wife and traded in his new car. (In his own peculiar way, Manville has liberated more women than the late Premier Ataturk.)

•

Only the Cosmetic Industry went through the year without noticeable variation. As one manufacturer put it: "Even a change for the worse would be an improvement."

George Fiedler

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IODOXYQUINOLIN SULPHONIC ACID
NEO CINCHOPHEN
OXYQUINOLIN BENZOATE
OXYQUINOLIN SULPHATE
POTASSIUM OXYQUINOLIN SULPHATE
PHENOBARBITAL
PHENOBARBITAL CALCIUM
PHENOBARBITAL SODIUM
PENTOBARBITAL SODIUM
THEOPHYLLINE

INTERMEDIATES

BENZYL CYANIDE
BENZALDEHYDE
ETHYL CYANOACETATE
PHENYL ACETIC ACID
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High Grade COSMETIC Powders

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test numbers are stamped on spaces provided on the label. The cans are shipped in single-layer corrugated boxes.

How does this package stand up under rough handling in shipment? While developing the product, Ethicon decided to find out how great a shock the delicate glass tubes could stand inside the can. They placed the cans in their shipping containers without padding or bracing, then dropped them repeatedly from a fire escape at fifth story level. Results showed excellent packaging protection. After a long series of falls, the tubes remained unbroken, save for one fall when a box landed on its corner, breaking one of the tubes. The jolt which the tubes felt in these tests was, to be sure, far more severe than any blows they would have to undergo en route from factory to operating room.

Since some hospitals may still prefer to do their own sterilizing, Ethicon will continue to offer the cardboard pack of sutures. Yet the company expects that canned sutures will serve about 80 per cent of their future demand.

CAMPHOR ICE: I have had a number of inquiries for camphor ice or cooling sticks such as are used on the lips to combat cracking, fever sores and the like. Could you give me a couple of formulas upon which I could work to determine which is the most suitable preparation to meet my requirements? Thanks in advance for your help. Brooklyn.

A standard preparation of this sort can be made from:

Powdered camphor	**20.0**
Light beeswax	**18.0**
Soft, white petrolatum	**15.0**
Spermaceti	**47.0**

Melt the spermaceti, beeswax and petrolatum. Mix and when the temperature drops to about 5°C. add the camphor.

Heavy liquid petrolatum	**110 Gm.**
Paraffin	**360 Gm.**
White petrolatum	**480 Gm.**
Camphor	**50 Gm.**

Melt the paraffin, add the white petrolatum and heavy liquid petrolatum. When all are liquefied, add the camphor and stir until dissolved.

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PUNCHES FOR TABLETS **DIES**

READERS' QUESTIONS

LIQUID INCENSE: Would you be kind enough to send us a working formula for a liquid incense? New Rochelle.

A product of this sort may be made along the following lines:

Alcohol, 95 per cent	**2 liters**
Infusion of musk	**800 cc.**
Infusion of tolu	**400 cc.**
Infusion of balsam of Peru	**400 cc.**
Infusion of benzoin	**400 cc.**
Infusion of storax	**400 cc.**
Oil of lavender	**80 cc.**
Oil of thyme	**80 cc.**
Oil of cloves	**80 cc.**
Oil of lemon	**50 cc.**
Oil of cinnamon	**30 cc.**
Geraniol	**20 cc.**

LIPSTICK: Due to the fact that I want to change my lipstick formula for a better one, I was wondering if you could help me by sending me a good formula. I would like one that is not too complicated, and which uses material which is not too hard to get. Mexico.

There is no really simple method for making a good lipstick. They are all based on a combination of several ingredients put together with skill and knowledge. However, I think that something on the following lines will serve your purpose.

Beeswax, sun-bleached	**20.0 parts**
Lanolin, anhydrous	**14.5 "**
Ceresine	**10.0 "**
Paraffin wax, 50/52	**15.0 "**
Carnauba wax	**3.0 "**
Petroleum jelly, white short fibre	**8.0 "**
Sperm oil, refined	**5.0 "**
Castor oil, special grade	**6.0 "**
Butyl stearate	**4.0 "**
Bromo acid	**2.5 "**
Lake colors	**11.0 "**
Perfume and preservative, about	**1.0 "**

The procedure consists of dissolving the soluble eosine in the butyl stearate and castor oil. Then add this solution to the absorption base and mix intimately. The remaining oils, fats and waxes are then melted, while the insoluble lake colors and preservatives are added and thoroughly ground in. Finally, the eosine solution is added to the main batch, then the perfume, and the complete mass is allowed to cool slightly, after which it may be passed through a mill with gently heated rollers and subsequently filled into molds.

FORMULA TERMINOLOGY: Thank you for the formula which you recently sent me. However, you did not state whether the quantities were to be in ounces, or grams, or any other measure. Can you please tell me what measure to use in preparing the material according to your formula? Pittsburgh.

It is common knowledge in the industry that when the type of measure is not specified in a formula, it is assumed to mean "parts by weight." In such a case, any unit may be used, such as ounces, pounds, tons, grams, etc.

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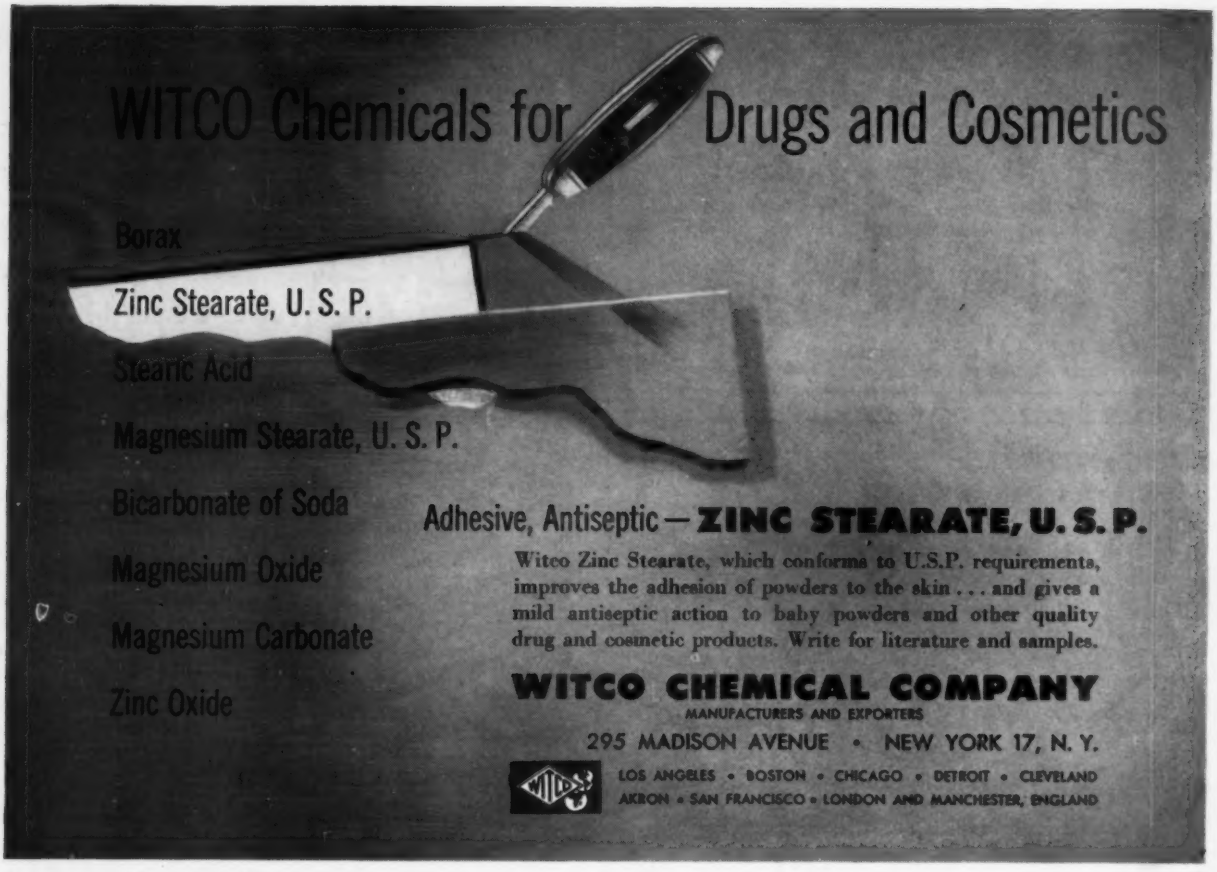
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